CONSTRUCTION NEWS

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RAILWAYS.

ATCHISON, TOPEKA & SANTA FE R. R.—This road began the operation of the last section of double track between Kansas City and Chicago recently. With the exception of the Chicago & Northwestern, between Chicago and Omaha, the Santa Fe is the only railroad operating two tracks to the Missouri River. Not only has the Santa Fe a double track to the Missouri River, but there is also in operation two, and for occasional distances, three tracks, between Kansas City and Albuquerque.

BALTIMORE & OHIO R. R. CO.—The work under contract and contemplated includes the following:

A change of line and grade reduction from Concord to Wilmington, Delaware, and a stone viaduct to replace the present steel bridge over Brandywine Creek; a third track from Sir John's Run, W. Va., to Great Cacapon, about five miles, which, when completed, will give continuous third track from Hodgesville to Orleans Road, about 34 miles, revision of line and change of grade between Hutton, Md., and Corinth, W. Va.; extension of third track from a point west of Terra Alta W. Va., to Rodemer, completing the third track from Rowellsburg to Terra Alta.

A second track is being laid between Rockwood and Somerset, Pa., and additional passing sidings put in; the Quemahoning branch is being extended from Jenner to a connection with the Somerset & Cambria branch at Somerset, and second track is being constructed in open cut, including elimination of single-track gauntlet, through the tunnel at Bakerstown, Pa., thereby making the second track continuous from Sand Patch, W. Va., to Hamler, Ohio, on the Chicago division.

Likewise, second tracks are being extended and grades revised on the Cleveland, Lorain and Wheeling, between Wheeling and Lorain, and 27 miles of second track is being constructed between Wellsboro and McCools, Ind., on the Chicago division, leaving only 86 miles of single track on that division when this last-mentioned work shall have been completed.

All the iew bridges on the Pittsburg and Chicago divisions and on the line between Philadelphia and Grafton, work upon which is now proceeding, will, it is expected, have been completed and placed in commission during the current fiscal year, as well as the grade-crossing work at Columbus. But the grade-crossing work at Baltimore and Chicago will extend over a period of several years.

BANGOR & AROOSTOOK R. R.—The Van Buren divisons, or the so-called St. Johns River extension is practically completed the last rails having been laid Nov. 3. The survey for the new line into northern Maine, the Allegash extension, have been practically completed but it has been definitely stated that no construction work will be undertaken at this time. M. Burpee, Houlton, Me., is Ch. Engr.

BOSTON, MASS.—The principal steam railroads running into Boston have made an adverse report regarding proposed electrification of the suburban zone. These railroads are the Boston & Albany, controlled by the New York Central; the Boston & Maine, controlled by the New Haven, and the New York, New Haven & Hartford. The report was made to the joint board, locally known as "The Big Four," the State Highway Commission, the Metropolitan Park Commission, the Massachusetts Railroad Commissioners and the Massachusetts Land and Harbor Commissioners. The chief objection made by the railroads to the plan of the Big Four was the maintenance of a double system—electric energy for passenger train service and steam for freight service. Another contention was that the use of electricity would permit of a much more frequent service in the suburban districts, particularly through the Newton's, but to develop these it would be necessary to reduce the fare from these points. The residents of the Newton's objected to this on the ground that it would tend to make this suburban district less desirable as a high-class residential suburb. In the scheme of the electrification as submitted, the third rail was considered the only practical solution by the Boston & Albany for the overhead bridges through the Newton's afforded too little clearance for a catenary system. The Boston & Maine and the New Haven both favored the overhead system. The Metropolitan Commission proposed the electrification on the Boston & Albany only to the limits of the Metropolitan district, which is Wellsley and Natick. Should the plan go through, however, it would be impractical to change from electricity to steam at this point and the electric zone will undoubtedly be extended to South Framingham, the Western terminus of the four-track division.

The estimated cost of the electrification is approximately $40,000,000, of which the Boston & Maine would have to expend $18,889,192; the Boston & Albany, $6,413,200, and the New York, New Haven & Hartford, $13,862,750.

BOSTON & MAINE R. R.—The four-tracking of this road between Saugus River bridge and Swampscott is contemplated. In conjunction with the work of eliminating the Lynn grade crossings, instructions have been received ordering the immediate abandonment of all grade-crossing work between Market St. and Central Sq. pending a decision in the matter.

BOSTON REVERE BEACH & LYNN R. R.—Surveys are being made for additional lines in Lynn. Tentative plans leave the main line at a point between Beachmont and Orient Heights, going through the centre of the old town of Revere. This would be in line with an extension later to Peabody, Salem and Beberly. This is a narrow gage road. M. O. Adams, Boston, Mass., is Pres.

CANADIAN NORTHERN OF ONTARIO.—D. D. Mann, First Vice-President, says the Toronto-Trenton branch will not be opened until June 1, 1911.

CANADIAN NORTHERN.—Work has been started grading the Morinville Branch in Alberta. So far it has not been decided where the branch will strike the main line.

ERIE R. R.—Contracts have been awarded for double tracking between Sherman and Rittman, Ohio, nine miles, to JAMES A. HART CO., 256 Broadway, New York, N. Y.; between Rittman and Sterling, Ohio, four miles, to FUGERSON & EDMONDSON CO., Brookville, Pa. The company has under consideration double tracking between Ravenna and Freedom, Ohio, six miles, and a short piece of track near Kent, Ohio. F. L. Staurt, 50 Church St., New York, is Ch. Engr.

GRAND TRUNK PACIFIC.—C. M. Hays, Pres. of the Grand Trunk Pacific R. R., states that trains will be running over the new transcontinental between the Atlantic and the Pacific wihin three years.

KENTUCKY.—The Ohio, Kentucky & Virginia Ry. Co. has filed articles of incorporation with a capital of $100,000. It is planned to build a railroad 300 miles in length, beginning at Manchester, on the north side of the Ohio river, extending through several Kentucky counties to Morgan county. The incorporators are W. W. Horne and P. S. Clark, Brooklyn, N. Y., Thomas Atkinson, Middlesboro, Ky., Wood Browning, R. R. Hutchusft and W. F. Downing, Lexington, Ky.

LONG ISLAND R. R.—That grade crossings are to be abolished and the electrification of the North Shore division will be rushed to completion, was decided last week after a series of conferences between engineers of the Public Service Commission, the railroad and commissioners appointed of the City of New York. Original plans submitted by the railroad company were disapproved by the Topographical Bureau, the engineers of Queens and many North Shore residents on the ground that they would close many thoroughfares in Flushing. Open streets were to be made accessible from the closed highways by the construction of marginal streets along the railroad's right of way. Substitute plans were submitted at the last hearing by a committee of property owners and the Queens engineers, who approved the railroad's plans for the Port Washington branch as to grade as far as Eighteenth Street, Flushing. Beyond that point they call for a continuance of all thoroughfares, with either depressed or elevated crossings.

On the North Shore branch, from Winfield Junction to Flushing, Whitestone and new exclusive home sections along the Sound and East River, no grade crossing difficulties have been encountered. Double-tracking of that branch has begun.

City and State have appropriated $400,000 for the elimination of the Queens grade crossings, and a similar amount was added by the Pennsylvania-Long Island Railroad Co. The cost of elimination, in accordance with plans of Queens engineers, will be $1,100,000. J. R. Savage, Jamaica, N. Y., is Ch. Engr. Noted Sept. 20.

MAINE CENTRAL R. R.—A twelve-mile extension from Newcastle to Boothbay Harbor, Me., is under consideration. T. L. Dunn, Portland, Me., is Ch. Engr.

MISSOURI.—The Charleston & Hickman R. R. Co. has been incorporated with an authorized capital of $600,000 to build a road from Ancil, in Scott County, by the way of Charleston to a point opposite Hickmann, Ky., in Mississippi County, a distance of 50 miles. The proposed road will connect with the Cape Firardeau & Thebes Bridge Terminal R. R. running south through Scott and Mississippi counties. Giboney Houck, Cape Girardeau, is interested.

NEW YORK, NEW HAVEN & HARTFORD R. R.—A sum to the the amount of $3,000,000 has been authorized for the improvement of the "Air Line." This will include $1,600,000 between Middletown and Willimantic, Conn. Aside from the double tracking of this 24 miles, the grades will be reduced, the Lyman Viaduct will be filled in and the Connecticut River bridge reconstructed. The line between New Haven and Middletown will probably be double tracked and the grades reduced. This line when rehabilitated will be used more, than in the recent past, for the direct New York and Boston travel. Edward Gagel, New Haven, Conn., is Ch. Engr.

PENNSYLVANIA.—Allegheny & Northwestern R. R. Bids are being received for the construction of this 21-mile line. The road has been surveyed and staked out and the estimated cost is $400,000. It will be between Evans' City and Harmarsville.

At Evans City the road will connect with the Pittsburg, Harmony & New Castle and at Mars with the Pittsburg & Butler. J. G. McPherson of Philadelphia, Pa., is Prest.

PITTSBURG, SHAWMUT & NORTHERN R. R.—Press advices are to the effect that it is semi-officially announced that the Pittsburg, Shawmut & Northern R. R., now being constructed between Shawmut, Elk county, and Mahoning, Armstrong county, on the Allegheny River, at the mouth of Mahoning creek, is to be extended to Brady's Bend and connection made with the Western Allegheny R. R. and the Baltimore & Ohio R. R. for entrance to Pittsburg by way of Fairmont, Butler and Callery. A survey has been made from Mahoning to Brady's Bend, on the west side of the river. The distance is about ten miles. A bridge across the river at Mahoning is now being built. The agreement said to have been made with the Western Allegheny calls for the use of the tracks of that line west to Fairmont, near Chicora, where connection would be made with the Foxburg division of the Baltimore & Ohio. The Shawmut line is being extended south from Mahoning along the west side of the Allegheny to Freeport, and will open a vast coal region, Entrance into Pittsburg from Freeport being impossible, the company, it is said, has decided upon the use of connections with the Pennsylvania lines at Freeport, and entering Pittsburg for passenger and freight traffic by way of Brady's Bend, Fairmont and Butler, over the Baltimore & Ohio for the through line from Shawmut.

TEXAS.—Chicago, Weatherford and Brazos Valley R. R. An amendment to the charter has been approved by the attorney general's department and filed in the state department. The amendment provides for the extension of the road from Bridgeport, Wise county, in a northeasterly direction to Gainesville, Cooke county, a distance of about 60 miles through the counties of Wise, Denton, Montague and Cooke. The main line of the road will now extend from Weatherford to Gainesville. Noted June 23.

ELECTRICAL RAILWAYS.

WATERFORD, N. Y.—The construction of a trolley line is under consideration from Waterford, N. Y., along the north bank of the Mohawk River, through the towns of Halfmoon, Crescent and Vishers Ferry to Roxford Flats. The estimated cost is about $150,000 or $200,000. Nichols Steenburgh, Crescent, N. Y., is interested.

NEW YORK, N. Y.—The construction of a crosstown trolley line in the Bronx has been decided upon. The proposed line will start at Washington Bridge, then run along Bascobel Ave. to 167th St., crossing Jerome Ave., then running under the concourse to Webster Ave., thence north to 168th St. to Franklin Ave. to McKinley Sq., through 169th St. north to 167th St. and Westchester Ave., thence to Clason Point and other local points east of the Bronx River. Mr. Hennessy, Pres. of the Bronx Central Transit and Improvement League, is interested.

NEWARK, N. J.—An ordinance has been introduced into the Council providing for the laying of a double track from Washington St. and Glenwood Ave. to Broad St. James M. Walker, Councilman, is interested.

GROVE CITY, PA.—A railway will be constructed from Franklin to Grove City. C. E. Smith is interested.

WAYNESBORO, PA.—The rights of way have been secured by the Chambersburg, Greencastle & Waynesboro St. Ry. Co. for the Blue Ridge Summit extension. A. C. Shyrock is Ch. Engr.

MONACA, PA.—The Monaca & Ambridge St. Ry. Co. has secured a franchise for building lines in the borough. W. J. Mellon is interested.

PITTSBURG, PA.—A railway will be constructed by the Allegheny & Northwestern Ry. Co. from Evans City, Butler County, to Harmarville, on the Allegheny River. The line will be 21 miles long and cost about $400,000. W. E. Heller, Philadelphia, is Pres.

WRIGHTSVILLE, GA.—Preliminary arrangements are being made by Ch. Engr. Laurence for the construction of a railway from Wrightsville to Lyons.

MONTGOMERY, ALA.—The construction of lines traversing the principal streets of the city will soon be started by the Alabama Traction Co. John J. Flowers is Pres. Also two interurban lines connecting Montgomery with Prattville and Wetumpka.

LAKE CHARLES, LA.—Work on the extension of the South Hodges street-car line to the Fair Grounds has started by the Lake Charles Ice, Light & Water Works Co.

LIMA, OHIO.—The Fourth St. extension of the south Pine St. trolley line will be built by the Ohio Electric Ry. from Second St. to the C. H. & D. tracks. Plans for construction are being prepared. Gaylord Thompson is Ch. Engr.

COLUMBUS, OHIO.—Surveys for the line from Columbus to Mansfield have been made by the Columbus, Mt. Vernon & Mansfield Traction Co. L. P. Stevens is Gen. Mgr.

TOLEDO, OHIO.—Work has been started on the proposed south end of the line of the Fort Wayne & Toledo Electric Ry. Co. R. T. Bastress is Pres.

POLAND, OHIO.—The construction of a line from Poland to Boardman and there to connect with the Youngstown & Southern lines is under consideration. John McClure is interested.

SOTH BEND, IND.—Two applications have been made to the City Council for a franchise to construct an electric railway to connect South Bend and Raymond City.

ALPENA, S. DAK.—Surveys are being made by the Missouri Valley Northern Ry. Co. for the construction of a railway from Chamberlain to Huron.

BUTTE, MONT.—The Butte Electric Ry. Co. will construct an extension to its line at Meadville, and also double-track a portion of its line in that city. J. R. Wharton is Gen. Mgr.

BILLINGS, MONT.—The Billings Traction Co. is reported to have secured the necessary capital for the construction of a street railway in Billings. A. C. Trumbo, Mushogee, Okla., is interested.

MEADERVILLE, MONT.—The Electric St. Ry. here will extend its line about two miles. M. Wharton is Mgr.

OSAGE, MO.—A line will be built by the Missouri-Osage Line through Osage City, where it will cross the Osage River. M. A. Creding, Upper Alton, Ill., in interested.

AUSTIN, TEXAS.—The plans for the construction of an interurban electric railway between Austin and San Antonio, and having branch lines to Lockhart, Luling and Seguin, are taking definite shape. Vories P. Brown, of San Antonio, one of the promoters of the project, announces that the formal organization of the company will be completed and a charter applied for. The company will have a capital stock of $2,000,000. Engineers who have gone over the route of the proposed line between this city and San Antonio estimate that the cost of its construction will be approximately $1,500,000, exclusive of the power plant. The main line will be about 85 miles long. On the route are the towns of Manchaca, Buda, Kyle, San Marcos, Hunter, New Bradford, Davenport and other smaller places. The proposed branch lines will have an aggregate of about 60 miles of track.

BROWNSVILLE, TEX.—T. Stegner, Kansas City, will apply for a franchise to construct an electric street railway system.

Highway Improvements in Texas.

Definite steps are being taken by a number of the counties in Texas with a view of making a general improvement in the highways. The State Government itself has for a number of years been most apathetic regarding highway improvements. At the last Legislature the sum of $500 was appropriated for experimental work. This amount, a mere bagatelle in itself, may lead to an interest by the state as a whole at a later date.

Several counties have enthusiastically taken up the matter of making their own roads. Only three of them, however, Farrant, Dallas and McLennan, have over 200 miles of surfaced roads. The mileage of improved highways is only about 3 per cent. of the total, being 4,652 miles. Steps have already been taken to greatly increase this mileage during the coming year. In addition to the fund, which will amount to $3,235,000, raised by general taxation for road maintenance and improvements, bond issues amounting to $4,000,000 have been authorized for road improvement. In addition to this here are proposed bond issues amounting to $5,200,000, which are now before the Commissioners for their approval, and $10,500,000 bonds are contemplated with a very good chance of being issued. This indicates that a sum in excess of $20,000,000 will be spent for road maintenance and improvement.

Ellis County leads the list in the amount of proposed bond issues with $800,000; Galveston and Houston Counties will each spend $500,000; Grayson, Bowie and El Paso Counties will each issue $250,000 in bonds. Bonds to the amount of $100,000 and over will be issued by eight other counties. All of this money will be expended to improving existing highways.

DALLAS, TEX.—The Trinity Valley Co. will finish the survey for the proposed interurban electric railway that it will construct between Dallas and Palestine, about 100 miles, by December 1. The route runs through Corsicanoa and a number of other important towns. Frank Westcott, Detroit, Mich., is in charge of the survey. It is announced by J. V. Watkins, of Dallas, and others who are interested in the project, that the construction of the line is assured.

ATASCOCA, TEX. — An interurban railway is to be built between Jourdanton and Pleasanton, a distance of about six miles. C. S. Young is promoting the project. It will be operated either by gasoline motor or electricity.

TAYLOR, TEX.—The construction of an electric belt railway, to connect the different industrial plants and steam railroads of Taylor, is being promoted by L. E. Walker, Pres. of the Quanah, Seymour, Dublin & Rockport R. R.

LOS ANGELES, CAL.—The Los Angeles Ry. Co. has commenced construction work on the extension of its system from Hollywood, through Cahuenga Pass to Lankershim. Estimated cost is about $500,000.

SALT LAKE CITY, UTAH.—The Alta & Jordan Valley Ry. Co. has been incorporated here to build 16 miles of railway from Sandy to Alta. The company is capitalized at $200,000. The officers are: B. F. Cummings, 295 Center St.; W. F. Williams, Secy. and Treas., 678 Fifth Ave.; M. A. Williams, 40 J St.; D. J. Williams, E. W. Cummings.

OTTAWA, ONT. — A company has been formed to construct an electric railroad between Ottawa and Kingston, passing through Smith's Falls, etc. The directors are R. McElroy, M. L. A. Corp; F. A. Henry, Westboro; J. S. McCann, Kingston; and E. P. McGarth, Ottawa.

OTTAWA, ONT.—The Ottawa, Rideau Valley & Brockville Ry. Co. states that it will begin work at once on its proposed 60-mile railway from Ottawa to Brockville. Andrew Haydon is Pres.

LIGHT AND POWER PLANTS.

(Denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—Bids are asked by Louis K. Rourke, Supt. of Streets, until Dec. 24, for street lighting for a period of ten years. Bids are to be based on furnishing approximately 10,000 lamps distributed in such separate districts as may be determined by the city, as follows: (a) for furnishing, maintaining and operating approximately 10,000 incandescent electric lamps in addition to the incandescent lamps now maintained under the existing electric lighting contract, or for the extension of the existing electric lighting contract for a period of ten years from Jan. 31, 1911; (b) for furnishing, maintaining and operating approximately 10,000 gas lamps with incandescent mantle burners; (c) for furnishing, maintaining and operating approximately 10,000 gas lamps with incandescent mantel burners and automatic lighting and extinguishing devices; (d) to furnish and install approximately 10,000 gas lamps with incandescent mantel burners; (e) to furnish and install approximately 10,000 gas lamps with incandescent mantel burners and automatic lighting and extinguishing devices. Item a, b and c to also include the maintenance and operations of approximately 210 fire-alarm signal lamps. The city will furnish the lamp posts. Bidders are to state a price for furnishing, maintaining and operating each lamp per annum, and price per lamp and automatic device complete and installed. Under Items d and e the city will furnish the gas by purchase from the gas company and provide for maintenance.

CLINTON, MASS.—Bids were received on November 9, by the Metropolitan Water and Sewer Commission, H. H. Sprague, Chn., for a hydroelectric plant: (a) Hydraulic machinery: Pelton Water Wheel Co., $27,500; with three bearings, $25,800; double turbine, $27,900; all including two exciter turbines, not called for by specifications. S. Morgan Smith, New York, $30,400; Wellman-Seaver-Morgan Co., Cleveland, Ohio, $32,440; Allis-Chalmers Co., Milwaukee, Wis., $57,520 (including two exciter turbines), (b) for hydroelectric plant: S. Morgan Smith, New York, $71,500 Westinghouse Electric & Mfg. Co., Pittsburg, Pa., $72,100; Allis-Chalmers Co., Milwaukee, Wis., $103,880; (c) electrical equipment: Crocker, Wheeler Co., Ampere, N. J., $41,500; Westinghouse Electric & Mfg. Co., Pittsburg, Pa., $43,200; General Electric Co., Schenectady, N. Y., $45,750; Allis-Chalmers Co., Milwaukee, Wis, $53,160. The guaranteed efficiency of the turbines is Allis-Chalmers, 79.5%, Pelton Co., 77.875 to 79%; Wellman-Seaver-Morgan Co., 81.5%; S. Morgan Smith, 82%.

ARLINGTON, R. I.—See item under Manufacturing Plants.

NEW YORK, N. Y.—Bids will be received by Kingsley L. Martin, Comr. of Bridges, until 2 p. m., Nov. 25, for electrical and ornamental work, elevators, stairs, drainage and anchor piers of the Queensboro Bridge over the East River, between the Boros. of Manhattan and Queens.

NEW YORK, N. Y.—Bids were received on Nov. 3, as follows, by the Park Board for all materials and labor required for furnishing and installing electric lighting fixtures in the Metropolitan Museum of Art, located in Central Park, on the west side of Fifth Ave., opposite 82d St. Boro. Manhattan: The Browe Co., 39 East 42d St., New York, $25,800; Black & Boyd Mfg. Co., $33,367; The Enos Co., $32,216.

NEW YORK, N. Y.—Bids will be received by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, until 3 p. m., Nov. 28, for alterations and repairs to heating and ventilating apparatus in Public Schools Nos. 1, 11, 12, 38, 44, 45, 49, 66, 67, 73, 77, 81, 92, 134, 137, 147, 160, 165 (Items 1 and 2), 170, 174, 177, 179, 184, 186, Stuyvesant High School, High School of Commerce and Truant School, Boro. of Manhattan; and for Item 1, installing heating and ventilating apparatus, and Item 2, installing temperature regulation in new Public School 167., Eastern Parkway, Schenectady Ave. and Lincoln Pl., Boro. Brooklyn.

*NEW YORK, N. Y.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 9, for installing a heating apparatus in the U. S. Assay Office, New York, N. Y., in accordance with the drawings and specifications, copies of which may be had at the office of the Supervising Architect or at the office of the Superintendent of Construction, at the discretion of the Supervising Architect.

BUFFALO, N. Y.—Bids were received by the Department of Public Works, on Nov. 4, for three steam turbine electric generators for the pumping station foot of Porter Ave. General Electric Co., Schenectady, N. Y., $287,438, $293,116, $302,619, $327,199, $292,428 and $340,640; Allis-Chamlers, Milwaukee, Wis., $274,900, $289,426; Westinghouse Machine Co., 200 Ninth St., Pittsburg, Pa., $248,180. Francis G. Ward is Comr.

ROCHESTER, N. Y.—Bids will be received until Nov. 21 by the Board of Education for furnishing and installing electric lights, wiring and fixtures in School 33, Grand Ave. J. S. Mullen is Secy.

*ALLENTOWN, N. J.—Contract has been awarded to the ADAMS ELECTRIC CO., 23 Chancery St., Trenton, N. J., for erecting the electric light plant here. Estimated cost, $40,000. W. W. Young, 220 Broadway, New York, Engr.

PHILADELPHIA, PA.—See item under Buildings.

HOMESTEAD, PA.—Bids are asked by the School Board until Nov. 23, for electric wiring for the new central school. Separate bids are asked for electrical fixtures. D. T. Powelson is Secy.

PHILADELPHIA, PA.—The only bid for the maintenance of gasoline lamps for one year has been submitted to the city by the Welsbach Street Lighting Co., at $28 per lamp. George R. Stearns is Dir. Pub. Wks.

PITTSBURG, PA.—The American Locomotive Works, Beaver and Stanton Sts., will construct a new power plant for its works in the lower North Side. Contract has been awarded to CUTHBERT RY. CO., at $25,000. It is proposed to equip the plant of the company for electric motor drive.

ANNAPOLIS, MD.—Bids were received by the Navy Department, Washington, D. C., on Nov. 12, as follows, for completing the power plant at the U. S. Naval Academy, Annapolis: Camden Heating Co., Item (1) $93,644, (2) $1,500, (3) $1,325, (4) $400, (5) $925; D'Olier Engineering Co., Philadelphia, Pa., (1) $96,293, (2) $1,800, (3) $1,350, (4) $285, (5) $1,300; John W. Danforth Co., Buffalo, N. Y., (1) $92,481, (2) $1,700, (3) $1,500, (5) $1,700; Evans Almirall & Co., 281 Water St., New York, (1) $90,545, (2) $1,500, (3) $1,250, (4) $60, (5) $1,000. Beekman Winthrop is Acting Secy.

WASHINGTON, D. C.—The contract for installing electric linings for certain vaults in the Treasury Department, Washington, has been awarded to the BANKERS' ELECTRIC PROTECTIVE ASSOCIATION, 104 Sudbury St., Boston, Mass., at $5,000.

WASHINGTON, D. C.—Bids are asked until 2 p. m., Dec. 13, by Lieut. U. S. Grant, Corps Engrs., U. S. A., Supt., for an electric wiring system for the State, War and Navy Department building, Washington.

NORFOLK, VA.—The Pintsch Compressing Co., 2 Rector St., New York, has made application for a franchise to erect a gas plant and to construct a pipe line.

GREAT FALLS, VA.—The Commissioners of the District of Columbia are considering the construction of a municipal electric light plant at Great Falls.

CHASE CITY, VA.—See item under Water Supply—Irrigation.

RICHMOND, VA.—The Commissioner of Streets has recommended that a franchise be granted to the Richmond Power Co. Noted on Nov. 10.

SPARTANBURG, S. C.—The Electric Power & Mfg. Co. will increase the capacity of the power plant here, and establish substation at Gaffney, S. C. The development of 2,500 additional horse-power and installation of more machinery is contemplated. F. H. Knox, is Gen. Mgr.

CAIRO, GA.—The city is considering enlarging the electric-light plant.

JACKSONVILLE, FLA.—The Jacksonville Gas Co., will erect three buildings to cost $15,500 for which plans have been prepared.

CAMP HILL, ALA.—The city on Oct. 24, voted $17,000 of bonds for an electric-light plant.

LEXINGTON, KY.—The Lexington Interurban & Street Ry. Co., O. P. Pope, Elec. Engr., is planning for the construction of an electric plant. Estimated cost $300,000.

MT. VERNON, OHIO.—The Mount Vernon Electric Co., Mt. Vernon, has been incorporated with an authorized capital of $300,000 by N. C. L. Kachelmacher and others to take over the old plant of the Mt. Vernon Ry. and Lt. Co. It is proposed to make extensive improvements.

EMPIRE, OHIO.—The Union Clay Mfg. Co. has awarded the contract to the RISINGER MFG. CO., East Liverpool, for electrical construction work for its entire plant here. The work will consist of power apparatus and motor generators, a set of electrical mine equipment, and the lighting of the plant and office buildings.

PORTSMOUTH, OHIO.—The contract for the heating and ventilating system for the Portsmouth High School building has been awarded to BAKER, SMITH & CO., Pittsburg, at $17,595.

AKRON, OHIO.—The Board of Education will receive bids until Nov. 22 for furnishing and installing mechanical feed stokers to be applied to the two 150 HP. boilers in the South High School building. J. F. Barnhart is Clk.

CLEVELAND, OHIO.—The contract for the steel work for the proposed power plant of the Cleveland Electric Illuminating Co., has been awarded to the T. H. BROOKS & CO., 3014 Lakeside Ave., Cleveland. Noted on Nov. 10.

A permit for the erection of a $40,000 switch house for the Cleveland Electric Illuminating Co. was issued on Oct. 28 by the Building Inspector. The new building will be located on East 70th st.

TOLEDO, OHIO.—The contract has been awarded to the HARRISON ENGINEERING CO., 42 East 23d St., New York, for installing the heating and ventilating systems in Keith's Theatre Building, Toledo. George S. Mills. Toledo, is Arch.

SAGINAW, MICH.—William F. McDonald, Ford Bldg., Detroit, has let the general contract for the new heating plant (direct steam) for the Argo Electric Vehicle Co., of Saginaw, to the GENERAL FIRE EXTINGUISHER CO., Saginaw.

NEENAH, WIS.—See item under Manufacturing Plants.

WILTON, WIS.—The Wilton Light and Power Co. has been granted a franchise to construct a light and power plant.

DES MOINES, IOWA.—The Des Moines Electric Co. will probably spend $70,000 in the spring for improvements to its plant. W. C. Sharp is Gen. Supt., Des Moines.

KEEWATIN, MINN.—The contract for the construction of a brick power house, 50 × 72 ft., at the new power plant, has been awarded to C. A. KILANDER, Hibbing, Minn., at $4,650. The contract for the electrical equipment has been secured by the ENTERPRISE MFG. CO., Minneapolis, at $4,264.

FERGUS FALLS, MINN.—The Water and Light Commission will receive bids until 8 p. m., Nov. 18, for 10,000 incandescent electric lamps. S. A. Levorsen is Secy.

MINNEAPOLIS, MINN.—Permission has been granted to the Minneapolis Gas Light Co. to erect a 3-story steel and iron water-gas generating plant, a boiler room and a radial brick stack, 212 ft. high. Three 300-HP. water-tube boilers will be placed in the boiler house. Estimated cost, $39,000. F. C. Shepard is Supt.

MINNEAPOLIS, MINN.—See item under Water Supply—Irrigation.

COLDWATER, KAN. — See item under Water Supply—Irrigation.

STAFFORD, KAN.—See item under Water Supply—Irrigation.

BLUE HILL, NEB.—Contract has been awarded by the Village Trustees, it is reported, to the ALAMO ENGINE & SUPPLY CO., Omaha, Neb., for constructing the electric light plant at $8,500.

CARRINGTON, N. ARK.—Bids will be received until Nov. 28 by the Board of County Commissioners for installing lighting fixtures for the court-house now being constructed. Bueshner & Orth are Archs., 602 Capital National Bank Bldg.

HEBRON, N. DAK.—Council has granted a franchise for the installation of electric light plant here.

COLUMBIA, MO.—See item under Water Supply—Irrigation.

LITTLE ROCK, ARK.—The Arkansas Pipe Lines Co., Little Rock, has been incorporated, it is stated, with a capital of $25,000 for the development, production and marketing of mineral oil, petroleum and natural gas in Arkansas. George J. Wolf is Pres.

CORPUS CHRISTI, TEX.—The City Council will receive bids until Nov. 18 for a gas franchise.

SAN LEON, TEX.—See item under Buildings.

BELLAIRE, TEX.—An electric light plant will be installed here by the Westmoreland Investment Co.

BROWNSVILLE, TEX.—Theodore Stegner, Kansas City, Mo., and associates will apply to the City Council for a franchise to construct an electric light and power plant and an electric street railway system here. If the franchise is granted immediate steps towards starting work on the improvements will be taken.

DECATUR, TEX.—F. A. Mabee has purchased the local electric light plant and water-works system from E. H. Baumguertner and will make improvements.

FORAKER, OKLA.—The city has awarded the contract to C. A. REES for constructing the electric light system here.

CHEROKEE, OKLA.—See item under Water Supply—Irrigation.

SPOKANE, WASH.—This city is negotiating to obtain control of all the power sites on the Priest River from its source in Priest Lake to its conjunction with the Pend d'Oreille River. T. C. Ralston is City Engr.

STANWOOD, WASH. — The Snohomish County Commissioners have granted to L. F. Query a franchise to operate an electric light system at Stanwood, the plant to be placed in operation soon.

WALLA WALLA, WASH.—The Pacific Power & Light Co. will construct a transmission line from here to Freewater County, Oregon, which will furnish power for pumping water for the irrigation of 11,000 acres. A. S. Grenier is Mgr., Portland.

CHEHALIS, WASH.—The Council has passed an ordinance granting a franchise to O. K. Paliner for a steam heating plant here.

TACOMA, WASH.—The contract has been let by the city to SAVAGE & NICHOLS for the construction of the upper portion of the Nisqually power system. The work consists of building a dam in the Nisqually River and a 10,000-ft. tunnel. Hamilton F. Gronen is Ch. Engr.

TIBURON, CAL.—Bids are asked until 11 a. m., Dec. 3, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., R. C. Hollyday Ch. of Bureau, for furnishing and installing at the U. S. Naval coal depot, here, two boilers, one boiler feed pump, one steel stack, one motor generator set, one transformer, a switchboard, wiring, piping, etc., and installation of a generating set to be furnished by the Government.

OROVILLE, CAL.—An application of 40,000 ins. of water of French Creek has been filed by O. M. Enslow. The water is to be diverted to generate electric power. The Great Western Power Co. will build an auxiliary dam in the Big Meadows in the spring.

LODI, CAL.—H. H. Henderson, City Engr., presented plans and specifications for the new municipal power plant to be erected at once in this city. The plans have been approved and accepted by the Board of Public Works.

LONGBEACH, CAL.—The Long Beach Consolidated Gas Co. will lay a [illegible] gas main [illegible] its new plant to Pine Ave. William M. Steele is Supt.

PORTERVILLE, CAL.—We are officially advised that bids will be asked in about 60 days for the proposed electric plant for the Tulare County Power Co. The plant will be operated by water power. Estimated cost, $225,000. Holley & Holley are Designing Engrs., Visalia, Cal.

GLOBE, ARIZ.—The Gila Valley Electric, Gas & Water Co., has been organized by A. T. Smith, to supply power, light and water to towns near here. Capital, $100,000.

TUCSON, ARIZ.—We are officially advised that the item noted on Oct. 27 stating that the Great Western Power Co. contemplated the construction of a reservoir and power development in Sabino Canyon is erroneous.

SHERBROOKE, QUE.—The plans being prepared by Ross & Holgate, Montreal, for the development of water power on the Magog River are nearing completion. Noted on Oct. 27.

DUNDAS, ONT.—The town on Nov. 8, signed a contract with the HYDROELECTRIC POWER COMMISSIONER for 600 HP. The only construction necessary is a pole line for a mile into the town.

TORONTO, ONT.—J. C. Eaton has been given a permit by the city to construct a power-house in Davenport Road, near Spandia Road. Estimated cost, $5,800.

BOISSEVAIN, MAN.—The by-law to borrow an additional $5,000 to furnish and install a heating apparatus for the new town hall, has been carried.

WINNIPEG, MAN.—Bids will be received until Dec. 1 by M. Peterson, Secy. Bd. of Control, for poles and line supplies.

MEDICINE HAT, ALTA.—The city is considering the construction of an electric power system. Estimated initial cost, $50,000. A. G. Grimmer is City Engr.

EDMONTON, ALTA.—John S. Fielding, 15 Toronto St., Toronto, Ont., has been engaged to prepare a report and plans for the proposed power development of the Grand Rapids by the city.

MOCTEZUMA (Sonora), MEX.—Olaf Wenstrom has applied to the Federal Government for a concession for the use of water of the Moctezuma River for the operation of a hydroelectric plant which he proposes to install.

PACHUCA (Hidalgo), MEX.—Miguel Taboada and Eduardo Soto both of Pachuca are having plans prepared for the erection of a large hydroelectric plant on the Laguna de Zupitlan, this state. Transmission lines will be constructed to mining districts and industrial centers of the section.

CHIHUAHUA, MEX.—The Sierra Mining Co. will install a hydro-electric plant at its mines in this state. Under the terms of the concession granted the company by the State Government it must complete the plant within 18 months.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

NORWALK, CONN.—Bids will be received by the Bridge Construction Committee until Dec. 20 for the erection of a reinforced concrete bridge to extend from Washington St., South Norwalk, to the east end of East Norwalk. Le Roy Montgomery, 151 Wall St., Norwalk, is Secy.

FREDONIA, N. Y.—The construction of a bridge over Canadaway Creek at Hunt's Corners has been decided upon.

ALBANY, N. Y.—The bids received by F. C. Stevens, Supt. Public Works, Albany, N. Y., on Nov. 10, for the construction of a lift bridge over the Erie Canal at Franklin St., Syracuse, N. Y., were as follows: W. J. Burns Co., Syracuse, N. Y., $45,578; Lupfer & Remick, Buffalo, N. Y., $44,009; Steel Storage & Elevator Co., 720 Main St., Buffalo, N. Y., $38,246; Raymond Kelton, 100 State St., Albany, N. Y., $46,963; Engineer's estimate, $43,132. One-third of the expense of erecting the bridge is to be borne by the city of Syracuse; one-third by the New York Central R. R. Co., and the remaining one-third by the State of New York.

PHILADELPHIA, PA.—The Philadelphia & Reading Ry. Co. has awarded the contract for bridges on the Port Richmond branch to the AMERICAN BRIDGE CO.

STONE HARBOR, N. J.—William H. Ford, 1024 Arcade Bldg., Philadelphia, asks for bids at once for a steel draw bridge to be erected here for the South Jersey Realty Co., H. S. Risley, Gen. Mgr., 918 Real Estate Trust Bldg., Philadelphia. It will be built this winter, and no time has been set for the closing of bids.

CENTRE VALLEY, PA.—The Lehigh County Commissioners, J. S. Troxwell, Clk., Allentown, Pa., have awarded the contract for the new bridge here to BUTZ & CLADER, Allentown, Pa. Robert Rathbun, Commonwealth Bldg., Allentown, is the engineer. The structure will be a three-span concrete encased structural steel girder bridge, and will be built this winter.

LOCK HAVEN, PA.—The Clinton County Commissioners, D. I. McNaul, Clerk, this city, have decided to build a plate girder concrete floor bridge over Chatham's Run. It will be about 600 ft. in length, and will not be started until next spring. The County Commissioners will select an engineer between now and the first of the year.

BROWNSVILLE, PA.—The erection of a bridge spanning Monongahela River is under consideration by the Commissioners of Fayette County. The estimated cost is $350,000.

NEW CUMBERLAND, PA.—The erection of a bridge over the Yellow Breeches Creek is under consideration by the County Commissioners.

PHILADELPHIA, PA.—The contract has been awarded to **WILLIAM HOLT**, Flemington, for the construction of a bridge spanning Capoolong Creek, in Hunterdon County.

SUSQUEHANNA, PA.—The Delaware & Hudson Co. is replacing all its bridges on the Jefferson division, between Lanesboro and Carbondale.

WILKES-BARRE, PA.—The construction of sixty new bridges has been recommended by the Grand Jury. The estimated cost is about $33,000.

CENTREVILLE, MD.—The contract has been awarded to **GEORGE E. LANE**, Queenstown, for the construction of the Island Creek Bridge.

MADISON, VA.—Bids are being asked by the Clerk of the Circuit Court of Madison County for the construction of bridge spanning Elk River. Plans and specifications may be obtained at the office of Childrey, Sunday Co.

MADISON, VA.—Bids are being asked by the Clerk of the Circuit Court of Madison County for the construction of a bridge spanning Clayton Run. Also a bridge over Mulatto Run and a bridge at point where Broad St. Ry. crosses tracks of Richmond, Fredericksburg & Potomac R. R. Plans and specifications may be obtained at the office of Childrey & Sunday Co.

MOUNDSVILLE, W. VA.—The contract has been awarded by the Marshall County Commissioners to the **WESTHAVER BRIDGE CO.**, New Philadelphia, Ohio, for the construction of a two-span concrete bridge across Fish Creek.

JACKSON, MISS.—The construction of three bridges is contemplated, two across Pearl River and another over Yockanookany River. J. Novma Jordy, New Orleans, La., is interested.

HARLAN, LA.—The contract has been awarded by the Board of Supervisors, Harlan, La., to the **LANA CONSTRUCTION CO.** for the construction of five bridges over Botna Ditch, at $10,750.

HARRIMAN, TENN.—The Harriman, Knoxville & Eastern R. R. Co. will construct 70-ft. through girder across Little Emory River. W. J. Clark, Harriman, is Ch. Engr.

PADUCAH, KY.—The construction of the Burlington bridge at Metropolis has been delayed owing to changes made in plans by the Board of River Engineers. The new plans call for a steel bridge carrying two tracks. The estimated cost is $5,000,000.

CRAWFORD, OHIO.—Bids are being received by A. E. Wackerman, Audr., Court-House, Bucyrus, Ohio, for flooring bridges. C. A. Geis, Engr., Court-House, Bucyrus, Ohio.

DELAWARE, OHIO.—W. H. Bodurtha, Delaware County, will soon receive bids for the superstructure of the Ferson bridge.

GREENFIELD, IND.—Commissioners of Hancock County have awarded contracts for the construction of three bridges to the **GREENFIELD BRIDGE CO.**

INDIANAPOLIS, IND.—The Board of Public Works has awarded a contract for the construction of two bridges, one at Dorman St. and the other at East Tenth St., to the **HACKERDORN CONSTRUCTION CO.**, at $9,000 and $9,300, respectively.

INDIANAPOLIS, IND.—The Commissioners of Marion County will receive bids until Dec. 2, 1910, for the construction of a concrete arch bridge in Decatur Township. Albert Sahm, County Audr.

SOUTH BEND, IND.—The contract for the construction of a bridge over St. Joe River at Bristol has been awarded to the **ELKHART IRON & BRIDGE CO.**, at $45,500. The bridge will be of steel structure with concrete floors. It will be 257 ft. long and 30 ft. wide, with 5-ft. sidewalks on either side.

WALKERTON, IND.—Work has commenced on the bridge for the new double track from Wellsboro to La Paz for the Baltimore & Ohio R. R. F. S. Brown is the contractor.

FRANKLIN, IND.—Bids are being received by W. P. Jennings, Audr., County Commissioners, for the construction of a steel bridge at Monroe St. J. P. Dickworth, Franklin, Engr.

FT. WAYNE, IND.—Bids will be received by George W. Lindermuth, Audr. of Allen County, until 10 a. m., Nov. 19 for the replacing of old bridge on Lima Road. Plans and specifications at the office of County Audr.

PORTLAND, MICH.—Surveys are being made by County Surveyor Crawford for the proposed bridge in Danby.

VILLE GROVE, ILL.—The contract has been awarded to **P. J. GOGGIN CONSTRUCTION CO.**, Arcola, for the construction of a bridge.

CHICAGO, ILL.—The Santa Fe System has prepared plans and specifications for replacing bridge No. 72 with a new structure. The estimated cost is $33,000.

PEORIA, ILL.—Bids will be received by the Board of Public Wks. for the erection of a concrete and steel bridge about Dec. 1. The estimated cost is $150,000. Geo. Simmons is Comr.

WAUKEGAN, ILL.—The construction of a concrete bridge across the north end of Pistakee Lake, to connect Fox Lake and McHenry County is contemplated. The estimated cost is $60,000. M. R. Miller is Supt. of Public Wks.

JOLIET, ILL.—An ordinance has been introduced into the City Council ordering the Joliet & Southern Traction Co. to replace the McDonough St. bridge at its own expense.

INGRAM, WIS.—The contract has been awarded to **L. J. WILBERT** for the construction of the approaches of two bridges, one over Little Jump River, and the other over Twin Creek River, one mile south of Little Jump River.

ST. LOUIS COUNTY, MINN.—The construction of a steel bridge over the St. Louis River is under consideration. O. Halden, Court-House, Duluth, is Audr.

TOPEKA, KAN.—Bids will soon be received by the Board of Commissioners of Shawnee County for the erection of a steel bridge. Plans are being made by V. R. Parkhurst for a 40-ft. concrete bridge. S. G. Zimmerman is Clk.

FAIRBURY, NEB.—The Board of Commissioners will receive bids in January or February for the construction of a bridge. F. A. Houston is Co. Clk.

VIRGINIA CITY, MONT.—Bids are being asked until Dec. 7 by the County Commissioner for the construction of a bridge spanning Madison River.

STEVENSVILLE, MONT.—The following bids have been received by the Board of County Commissioners for construction of the bridge across Bitter Root at Stevensville: Security Bridge Co., Minneapolis, $10,400; O. E. Peppard, $9,995; A. Y. Bayne & Co., $9,900; Roberts, Ibblings & Lee, $9,997; William Oliver Bridge Co., $10,500; Minneapolis Steel & Manufacturing Co., $10,186, and J. F. Harrington, $9,983. The contract has been awarded to **O. E. PEPPARD**.

MARYVILLE, MO.—The construction of a bridge over the tracks on North Mulberry St. has been decided upon. A. S. Robey is Mayor.

SPRINGFIELD, MO.—The contract has been awarded to the **CANTON BRIDGE CO.** for the construction of a bridge over Wilson Creek, on Boonville St.

ST. LOUIS, MO.—Arrangements have been made between the Board of Trustees and the East Side Levee and Sanitary District of the Highway Commissioners, Edwardsville, for the construction of four bridges over the diversion channel for Chakia Creek. The estimated cost is $40,000.

ST. LOUIS, MO.—The Missouri Pacific Ry. Co. is considering the construction of a viaduct to eliminate the Chouteau Ave. grade crossing. The estimated cost of the viaduct is $200,000.

ST. LOUIS, MO.—The City Council has passed a resolution authorizing the appropriation of $50,950 for land to be used for approaches of municipal free bridge.

NACOGDOCHES, TEX.—Surveys are being made by Leo. T. Peden, Consult. Engr., for the proposed steel bridge on Fredonia St. and a concrete causeway at Main St.

NOWATA, OKLA.—The contract has been awarded by the Nowata County Commissioners to the **CANTON BRIDGE CO.**, Canton, Ohio, at $44,090, to erect 25 bridges.

ARDMORE, OKLA.—The Arbuckle & Western Ry. will construct several bridges. Oscar O. Ayres is Ch. Engr.

GRAND JUNCTION, COLO.—The construction of a bridge at Main St. and Clifton is under consideration. George W. Thompson is interested.

NORTH YAKIMA, WASH.—Two bridges will be built by the County Commissioners, one spanning Sunnyside Canal on Hanover Road and the other across the Cowiche River at Painted Rocks. The estimated cost is $30,000.

ABERDEEN, WASH.—Plans and specifications are being prepared by the City Engr. for the construction of a bridge near Dabney Hill.

OLYMPIA, WASH.—Work will soon commence on the construction of a bridge to span the Nisqually River. The cost is estimated at $7,500.

SEATTLE, WASH.—The contract has been awarded to **GRANT-SMITH & CO.** for the construction of the Stone Ave. bridge at $60,000.

NAPLES, CAL.—**PETTERSON & SCHMIDT**, 648 Pacific Electric Bldg., Los Angeles, have been awarded contract at $35,000 for constructing four highway and one railway bridge for the Pacific Electric Ry. and the Huntington Land Co. The highway bridges will be 22 ft. wide, the railway bridge 42 ft. wide and 100 ft. long. The construction will be reinforced concrete with a 60-ft. clear span and 20 ft. abutments at each end. There will be curved wings at each end and the railings will be artificial stone. The plans are at the office of the engineers, Mayberry & Parker, Pacific Electric Bldg., Los Angeles.

SANTA ANA, CAL.—The City Clerk has been instructed to advertise for bids for the construction of a bridge on West Fifth St., to take place of the present one.

VISALIA, CAL.—It was ordered that bids be advertised for on the Conyer St. bridge. This bridge is to be built by the city on condition that the property owners of the street agree to donate and attend to all grading they have already agreed to do.

TWIN FALLS, IDAHO.—Work on the steel bridge spanning Snake River at the Blue Lakes will soon commence.

VANCOUVER, B. C.—Plans have been approved by the Board of Ry. Comrs. for the bridge over Second Narrows.

VICTORIA, B. C.—The construction work of the new traffic bridge connecting Johnson St. with the Indian Reserve. Theo. Sorby has prepared the plans.

BUILDINGS.

(**Denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—Bids are asked by Charles Logue, Chn. School House Comn., for the erection of a school building in Sherwin District, until Nov. 21.

BOSTON, MASS.—A building is planned to adjoin the present Denison House on Tyler St., at an estimated cost of $65,000. Robert H. Gardner is Chn. of the Committee and Richard W. Hale, 60 State St., is Treas.

CAMBRIDGE, MASS.—Plans have been accepted and bids will soon be asked for by the Trustees of the Building Committee for the construction of a Y. M. C. A. building.

PITTSFIELD, MASS.—We are officially advised that bids will be received early in December for the construction of a 2-story brick school. McLoughlin & Seibert, of Pittsfield, are the Archs. William H. MacInnes, Mayor, is Chn. of Building Com. Estimated cost, $50,000.

PROVIDENCE, R. I.—Plans for the proposed tuberculosis building at the City Hospital have been completed and approved. The structure will be T-shaped, with two wings, 24 x 64 ft. Martin & Hall, Union Trust Bldg., Providence, are the Archs.

NEW YORK, N. Y.—See item under Miscellaneous Contracts: Operating Rooms.

The Gingold Realty Co., 101 West 42d St., plans to erect a 6-story apartment house, 199.10 x 89.11 ft., on the west side of Amsterdam Ave., between 176th and 177th Sts. J. C. Watson, 217 West 125th St., is Arch. Cost, $1,000,000.

NEW YORK, N. Y.—Schwartz & Gross, Archs., 347 Fifth Ave., are preparing plans for an apartment house at the southwest corner of Broadway and 115th St., on a plot 75 x 100 ft. Paterno Bros., Inc., 510 West 114th St., are the owners.

Harry T. Howell, Arch., Third Ave. and 149th St., is preparing plans for six 5-story brick tenements, 40 x 89.7 ft., with plastic slate roof, on the east side of Fox St., near 163d St. The owner is the William C. Oesting Co., 985 Fox St. Total cost, $180,000.

The Stonington Realty Co., Ignatz Roth, Pres., 31 Nassau St., plans to erect four 5-story brick tenements, 39 x 95 ft., with tin roofs, on the west side of Webster Ave., near 184th St. Lorenz F. J. Weiher, 271 West 125th St., is the Arch.

James F. Meehan, 815 Hunts Point Ave., the Bronx, is contemplating the erection of an 8-story apartment house, 118 x 112 ft., at the northwest corner of Southern Boulevard and 180th St. The estimated cost is $200,000. Charles O. Kreyenborg is preparing plans.

NEW YORK, N. Y.—Gronenberg & Leuchtag, Archs., 7 West 22d St., are preparing plans for a 9-story brick and stone apartment house, 70.11 x 90 ft., with a slag and gravel roof, at the northwest corner of Seventh Ave. and Cathedral Parkway. The Winston Holding Co., 320 Broadway, is the owner. Cost, $250,000.

The contract to build a 12-story brick and stone apartment house, 108.5 x 60 ft., with a concrete and tile roof, at the northeast corner of 21st St. and Lexington Ave., has been awarded to the **EDWARD CORNING CO.**, 100 William St. The Number One Lexington Avenue Co., 129 East 19th St., is the owner. Herbert Lucas, Arch., same address, prepared the plans. Cost, $300,000.

F. A. de Meuron, Arch., 31 East 27th St., will be ready to receive bids some time in January next, for the general construction of the proposed Parochial school for the Rev. E. M. Sweeney, Pastor, 221 West 107th St., of the parochial School and Auditorium of the Ascension, to be erected in West 108th St., near Broadway, at an approximate cost of about $100,000. The construction will be strictly fireproof, of light brick, limestone and terra cotta. The building will be four stories high and 70 x 100 ft.

NEW YORK, N. Y.—Plans for two 5-story brick tenements, 37.6 x 88 ft., have been prepared by Harry T. Howell, Arch., Third Ave. and 149th St. They will be erected on the south side of 164th St., east of Boston Road. The owner is Robert N. Quinn, 2968 Webster Ave. Cost, $80,000.

Two 5-story brick tenements are to be constructed from plans drawn by Goldner & Goldberg, Archs., 704 Jackson Ave., on the south side of 39th St., west of Robbins Ave., by the Cypress Construction Co., of which Max Cohen, 1058 Grant Ave., is Pres. Cost, $70,000.

The Fischel Realty Co., 61 Park Row, is arranging for the construction of two apartment houses, six stories each, to occupy the block front on Seventh Ave., between 131st and 132d Sts., to cost in the neighborhood of $400,000. There will be apartments for 36 families in each house. Schwartz & Gross, Archs., 347 Fifth Ave., are preparing the plans. Jacob Fischel is Pres. and Henry W. Flateau, Secy. of the company.

Plans were filed recently in the Bureau of Buildings, for the erection of P. S. No. 168, on the west side of Throop Ave., between Bartlett and Whipple Sts., Brooklyn. It will be four stories in height above the basement, and will have a frontage of 200 ft. and a depth of 91 ft., with an extension, 74 x 53 ft. The materials to be used are brick and stone. C. B. J. Snyder, is Supt. Bldgs., Bd. of Education. Cost, $270,000.

NEW YORK, N. Y.—Bids are asked until 3 p. m., Nov. 28, by C. B. J. Snyder, Supt. of Buildings, Dept. of Education, for the general construction, etc., of new P. S. No. 171, on the south side of Ridgewood Ave., between Nichols and Lincoln Aves., Boro. of Brooklyn.

NEW YORK, N. Y.—The following bids were received on Nov. 11 by Michael J. Drummond, Comr., Dept. of Charities, for furnishing all the labor and materials required for the erection and completion of a new dormitory for female help at the Metropolitan Hospital, Blackwell's Island, City of New York: Thomas J. Buckley Construction Co., 103 Park Ave., $112,549; Libman Contracting Co., 1968 Broadway, $113,840; D. J. Ryan, 723 Third Ave., $121,909; E. D. Broderick, 1382 Lexington Ave., $120,400; Bettsworth-Dickerson & Co., $123,704; P. J. Brennan & Son, 624 Madison Ave., $119,000; H. C. Stowe Construction Co., $118,000; Kelly & Kelley, Inc., 45 East 42d St., $128,414; Thomas J. Waters Co., $121,496; Albert Winternitz, $123,470; L. J. Rice, $123,167; Charles Wille, $114,932; F. T. Nesbit & Co., 116 Nassau St., $112,930; William Horn Co., $134,600; A. L. Guidone & Co., $119,450; John H. Deeves, $116,500; Concord Construction Co., $116,192; J. H. Parker Co., $121,875; Traub & Fox, $117,880; Thomas B. Leahy Building Co., $107,107.

NEW YORK, N. Y.—See item under Miscellaneous Contracts: "Market Repairs."

ALBANY, N. Y.—The bids received on Nov. 7, by the Board of Contract and Supply, for the construction of a new station house for the Third Precinct, on North Pearl St., were: A. Pasquini, $36,975; R. P. Sewall & Son, $35,450; John J. Kelly, $32,670; Peter Keeler Building Co., $34,233; Morris Kantrowitz, $33,000; Feeney & Sheehan Building Co., $35,500; John J. Finn & Son, $34,231; Collins Bros., $36,150; all of Albany, and Farrell & Rigney, of Rensselaer, $35,983. James B. McEwan is Mayor.

BUFFALO, N. Y.—Esenwein & Johnson, Archs., Ellicott Sq. Building., are preparing plans for a group of Asylum Buildings, 208 x 368 ft., three stories and basement of stone, brick and steel construction, to be erected by the Buffalo Orphan Asylum, at Elmwood Ave. and Scajaquada Boulevard. John J. McWilliams, is Pres. of Bd. of Trustees, 403 Virginia St.

The Peoples Milk Co., 1474 Main St., is receiving bids for a 2-story and basement dairy building and barn, 50 x 190 ft., of brick, concrete and tile, to be erected at 70-78 East Ferry St., from plans of F. S. Matthewson, Arch., Law Exchange Building. Estimated cost, $40,000.

G. Morton Wolfe, Arch., 638 Ellicott Sq., has completed plans for a store and office building, 100 x 100 ft., two stories and basement, of brick and steel construction, to be erected at Main and East Ferry Sts., by John O'Brien. Estimated cost, $40,000.

BUFFALO, N. Y.—Lansing, Blye & Lyman, Archs., Prudential Bldg., have completed plans and let contracts for a church building, 56 x 95 ft., stone and brick construction, for the Pilgrim Congregational Church, at the corner of Richmond Ave. and Breckinridge St. Cost, $45,000. Masonry, to **BECK & OEHLER CO.**, 465 Riley St.; carpentry, to **STOKES BROS.**, 50 Brayton St.

DEPEW, N. Y.—Frank P. Barnard, Prudential Bldg., Buffalo, will erect 100 workingmen's dwellings, of frame construction, from plans of Robert North, Arch., Prudential Bldg., Buffalo.

LACKAWANNA, N. Y.—W. H. Zawadski, Arch., 798 Fillmore Ave., has completed plans for a 2-story church and school building, at Lackawanna (South Buffalo), for the St. Hyacinth Polish Roman Catholic Church. Rev. C. Slizewski is Pastor of Lackawanna. It will be of brick and structural iron. Estimated cost, $45,000.

SARATOGA SPRINGS, N. Y.—Charles A. Sussdorf and Franklin B. Ware, Associate Arch., 131 Lancaster St., Albany, have completed plans for a fireproof brick and stone hospital, two stories, 40 x 135 ft. and 40 x 60 ft., at Saratoga Springs. The architects will receive estimates soon. Approximate cost, $75,000.

SYRACUSE, N. Y.—The Erwin Memorial Methodist Episcopal Church, Rev. Glenn A. Baldwin, Pastor, 1912 East Genesee St., will erect a Church, 96 x 114 ft., of brick and stone, at Westcott St. and Phelps Pl., from plans prepared by Brown, McAghon & Strassle, Archs., 31 East 27th St., New York. Estimated cost, $40,000.

*WINGDALE, N. Y.—Bids will be received by Commission on New Prisons, Capitol, Albany, until noon, Dec. 15, for the erection and completion of a prison plant to take the place of Sing Sing to be erected on the selected site near Wingdale, in the town of Dover, Dutchess County. George McLoughlin is Secy.

COLLINGSWOOD, N. J.—George E. Savage, Arch., Witherspoon Bldg., Philadelphia, Pa., is preparing plans for a $40,000 church and Sunday school building for the First Baptist Church of Collingswood.

ATLANTIC CITY, N. J.—**ELWOOD BUCKLEY** recently obtained a permit to erect a 4-story apartment house, containing 220 rooms, at 147 St. James Pl., for Herman Kettman. It will be fireproof and will cost $50,000.

BLOOMFIELD, N. J.—The following bids were received on Nov. 1, by the Board of Education, for the construction of a high school building at Bloomfield: William G. Sharwell & Co., $218,870; Fred. Kilgus, $204,793; W. H. Fissel, 1123 Broadway, New York, $211,000; Bank & Fits Randolph, $218,190; Charles H. Peckworth, 415 Hudson St., New York, $209,853; DiRiso Bros., $226,900; J. A. Carter, Heed Bldg., Philadelphia, Pa., $165,010; William Werner, 657 Vanderbilt Ave., Brooklyn, N. Y., $238,506; Nielson Bros., $239,900; Thomas J. Buckley, 103 Park Ave., New York, $217,900; W. O. Weaver & Sons, $209,500; Westchester Engineering Co., 39 East 42d St., New York, $197,500; Concord Construction Co., $211,973; Oscawana Building Co., $227,700; Herman C. Schneider, $224,129.

JERSEY CITY, N. J.—The general contract for a cold storage warehouse building, which will be erected on the northwest corner of Henderson and Ninth Sts., Jersey City, for the Swift Co., has been awarded to the **MACDONALD ENGINEERING CO.**, 98 Jackson Boulevard, Chicago, Ill. The buildings will be of concrete, four stories in height and 300 x 100 ft. The cost of the structure will be $150,000.

WEEHAWKEN, N. J.—Plans have been filed by Albert P. Bauman for an apartment house, to be erected on the southwest corner of Second St. and East Boulevard, in Weehawken. The house will be five stories in height, and will cost about $40,000.

EASTON, PA.—A building to be used for the Mechanical Engineering Department of Lafayette College, is to be erected, at an estimated cost of $200,000. Rev. E. D. Warfield, LL. D., is Pres.

HAZELTON, PA.—John Markle, coal operator, will erect a new library building in Hazelton, at a cost of $50,000, as a memorial to his late father, George B. Markle.

PHILADELPHIA, PA.—The contract to erect an addition to the recently completed club house of the Union League, on the east side of Sanson St., has been awarded to CRAMP & CO., Commonwealth Bldg. Horace Trumbauer, Land Title Bldg., is the Arch. It will be five stories high, 113 × 100 ft. and will correspond architecturally to the new structure. Cost, $400,000.

Edwin F. Durang & Son, Archs., 1200 Chestnut St., are preparing plans for the proposed parochial school for the Church of the Transfiguration at 55th St. and Cedar Ave. Cost, $50,000.

PHIDADELPHIA, PA—SAMUEL SHOEMAKER, 58th and Haverford Sts., will soon begin the erection of 40 3-story houses on both sides of Erie Ave., between 19th and 20th Sts. The cost will be $200,000.

Plans are being completed by Edwin F. Bertolett, Arch., 32 South Broad St., for the erection of a stone building at 19th and Chestnut Sts., to be occupied by the Post Graduate School of Dentistry. Dr. A. W. Jarman, 1732 Chestnut St., is interested. Cost, $100,000.

PHILADELPHIA, PA.—Anderson & Haupt, Archs., Drexel Bldg., will receive bids until Nov. 28, for an addition to the wall-paper warehouse, at Ridge Ave. and 31st St., for Morris Isaacs, 2220 Ridge Ave. It will be of heavy construction, brick, three stories in height, and 79 × 17 ft. and will contain one heavy freight elevator.

The contract for the construction of the proposed hotel and apartment building to be built at the northeast corner of Walnut and 18th Sts., has been awarded to the THOMPSON-STARRETT CO., 49 Wall St., New York. W. W. Gibbs, Pennsylvania Bldg., this city, is the owner. The building will cost approximately $600,000 and will be of granite, limestone, terra cotta, structural steel and brick, with concrete floors, etc. It will be 10 stories in height, 62 × 122 ft., and will contain private power and heating plant, laundry and full equipment, high speed elevators, extensive plumbing system, etc. Henry J. Blauvelt, Marine and Merchants Bldg., this city, is the Arch. The general contractors will soon be ready for all sub-bids, which will be received in the local office.

Albert Kahn and Ernest Wilby, Archs., Trussed Concrete Bldg., Detroit, Mich., will receive bids until Nov. 24 for a garage and storage building, on Broad St., between Pearl and Vine Sts., for the Packard Motor Car Co., F. B. Jackson, Mgr., 216 North Broad St. The building will be eight stories in height, with basement, and will be 69 × 164 ft., of reinforced concrete and structural steel, and will contain power and heating plants, heavy duty elevators, passenger elevator, etc.

READING, PA—The contract to erect a brick and steel hotel for the Greater Reading Hotel Co., has been awarded to the WESTLAKE CONSTRUCTION CO., 717 Locust St., St. Louis, Mo. It will be a fireproof structure, nine stories high. James H. Windrim, Commonwealth Bldg., Philadelphia, is the Arch. Estimated cost, $500,000.

MT. CARMEL, PA.—All former bids for the construction of the proposed banking and office building at Third and Oak Sts., for the Guarantee Trust & Safe Deposit Co., Robert Muir, Chn., of the Building Com., have been rejected, and the owners and the architects, E. Z. School, 521 Court St., Reading, will receive new bids until Nov. 28. The building will be of structural steel, stone, terra cotta and brick, four stories in height, 50 × 83 ft. It will be thoroughly fireproof.

RICHMOND, VA.—Plans have been completed by R. H. Hunt, Arch., of Knoxville, Tenn., for the erection of a church for the congregation of the Tabernacle Baptist Church, at the southeast corner of Grove Ave. and Meadow St. Henry Winston, P. E. Eubank and George C. Watkins are members of the Building Committee. Estimated cost, $70,000.

CHARLOTTESVILLE, VA.—The contract for the erection of a $40,000 addition has been awarded to HARRIS BROS., Charlottesville.

NATIONAL SOLDIERS' HOME, VA.—The contract for the erection of new barracks has been awarded to J. H. BUNCOR, Hampton, Va., at $173,770. The contract included heating, plumbing and electric wiring.

*MONTGOMERY, ALA.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 15, for the miscellaneous changes at the extension to the U. S. Court-House and Post-Office at Montgomery.

TOLEDO, OHIO.—The contract for erecting a commercial building at 917 Madison Ave., for Horton C. Rorick, has been awarded to JOHN ARNSMAN. The proposed structure will be three stories high, and 20 × 100 ft. Plans were prepared by Bacon & Huber, Archs., Spitzer Bldg.

TOLEDO, OHIO.—The Second National Bank has purchased the Hartford block at Summit St. and Madison Ave., from the Baker heirs, for $275,000. According to reports, it is the intention of the officers to build a bank building on this site, at an estimated cost of $200,000. T. C. Stevens, 308 Madison Ave., is Vice-Pres.

WOOSTER, OHIO.—It was recently announced by L. E. Holden, Pres., of the Wooster University, that Mrs. J. S. Kennedy, of New York, had given the institution $100,000, for the erection of a dormitory as a memorial to her nusband.

ASHLAND, OHIO.—Bids will be received until Nov. 22, for the erection of a hospital from plans prepared by Frank L. Packard, Arch., Hayden Bldg., Columbus. The cost of the structure is estimated at $70,000.

POMEROY, OHIO.—Bids will be received until Dec. 7 for the erection of an O. N. Guard Armory building, after plans and specifications by Howard & Merriam, Archs., Capitol Trust Bldg., Columbus. At a previous bidding all the bids were refused as being excessive.

CARTHAGE, OHIO.—Harry J. Rill, Buhl Bldg., Detroit, Mich., is preparing plans and will receive bids about Dec. 1 for a new chapel, 176 × 275 ft., for the Roman Catholic Sisters of Good Shepherd, of Carthage, Ohio. Cost, $50,000.

TOLEDO, OHIO.—W. M. Stophlet, Nasby Bldg., is preparing plans for the Flower Hospital, care of Dr. E. O. Crist, 2044 Maplewood Ave. Bids will be received about Dec. 15. The building is to be constructed of pressed brick, stone, structural steel, with composition roof, hardwood and enamel finish, marblelithic or composition floors. Cost, $100,000.

CRAWFORDSVILLE, IND.—Bids will be received some time in January for the erection of a reinforced concrete building for the Supreme Tribe of Ben-Hur, by John C. Snyder, Chn. of the Building Com. It will be six stories high and 65 × 150 ft. Herbert L. Bass & Co., Indiana Pythian Bldg., Indianapolis, are the Archs. Cost, $150,000.

INDIANAPOLIS, IND.—Hibben, Hollweg & Co., 131-141 South Meridian St. have bought of Milton N. Morris, the property with 33 ft. frontage and a depth of 200 ft. adjoining its present building on the north. The firm acquires with this purchase, the ownership of ground at the northeast corner of Meridian and Georgia Sts., approximately 100 × 202 ft., on which it is the intention to erect, in the near future, a building, seven or eight stories high.

INDIANAPOLIS, IND.—Bids for the general contract for the construction of the proposed St. Vincent's hospital, on the Fairbank site, have been rejected. The bids exceeded the amount of money that is to be expended for the work. Minor changes in the plans will be made and new bids advertised for.

INDIANAPOLIS. IND.—D. A. Bohlen & Son, Archs., will receive bids about Dec. 15 on modified plans for the construction of the St. Vincent's Hospital on the old Fairbank site. All former bids were rejected because they named a higher amount than was to be expended.

DETROIT, MICH.—George D. Mason, 80 Griswold St., is preparing plans and will receive estimates about Dec. 1, for the proposed Parish House, three stories and basement, 100 × 170 ft., for the Woodward Ave. Baptist Church. Rev. Maurice P. Fikes is Pastor, 26 Elliot St. Cost, $50,000.

HOUGHTON, MICH.—E. Brietmaier & Son, 111 Mason St., Milwaukee, Wis., are taking figures on a school building for the St. Ignatius Catholic Church, Rev. A. J. Rezek, Pastor, Houghton. Estimated cost, $40,000.

PONTIAC, MICH.—Bids were received as follows on Nov. 14, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Pontiac: King Lumber Co., Charlottesville, Va., $72,800; Vintom Co., Detroit, Mich., $94,263; Sealer Construction Co., Pontiac, $74,038; Hazelton & Walin, Chicago, $74,000; Charles W. Gindele Co., Chicago, $74,500; Northern Construction Co., Milwaukee, Wis., $75,800; Barnes Bros., Greenville, Ill., $74,300; Conners Bros. Co., Lowell, Mass., $76,900. Time, Oct. 1, 1911.

DETROIT, MICH.—Kastler & Walsh, Chamber of Commerce Bldg., will receive estimates about Dec. 1 on the proposed $100,000 Church, one story and basement, 106 × 216 ft., with a seating capacity of 2,200. St. Hedwigs Roman Catholic Church, is the owner. Rev. Father Bartholemew Szczerba, Pastor, 1114 Junction Ave. The building will be heated by steam.

Harry J. Rill, Buhl Bldg., is preparing plans for a brick and stone, 1-story and basement church, for St. Stanislus' Church. Rev. Francis Czella, is Pastor, 1272 Dubois St. It will be heated by steam and will cost $80,000.

DETROIT, MICH.—Ralph Phelps, Secy. Public Library Commission, Butler Bldg., has accepted the plans of Stratton & Baldwin, Union Trust Bldg., for a 1-story and basement branch library, 68 × 102 ft., to be located at Dix Ave. and the Boulevard. Also the plans of B. C. Wetzel & Co., Hammond Bldg., for a 1-story and basement library building, 70 × 110 ft., to be located at Warren Ave. and the Boulevard. The City of Detroit is the owner, and will receive estimates after Nov. 20. About $50,000 will be spent for the buildings.

IRONTON, MICH.—The Board of Education of Ironton is contemplating erecting a 3-story school, the cost of which will be $120,000. It will be heated by steam.

NILES, MICH.—John D. Chubb, 112 South Clark St., Chicago, Ill., will receive estimates about Dec. 15 on the steam heating system for the proposed $85,000 school for the Board of Education of Niles. J. D. Grenamyer, M. D., is Secy.., 202 North Third St., Niles. The general contractor is GEORGE RICKMAN & SON CO., Pratt Bldg., Kalamazoo.

PONTIAC, MICH.—W. E. N. Hunter, Chamber of Commerce Bldg., Detroit, has let the general cantract for the proposed one-story and basement brick church, 93 × 93 ft., for the Central Methodist Episcopal Church. Rev. D. H. Glass, Pastor, Pontiac, to FRED C. STEINBUGH, 20 Johnson Ave. Cost, $40,000.

MILWAUKEE, WIS.—The Atlas Amusement Co., T. H. Cochrane, of Portage, Wis., and Aitkens & Crawford, of St. Louis, have purchased two sites for theatres in the city. The company plans the erection of two reinforced concrete theatre buildings to seat 1,200 each, at a cost of approximately $70,000.

*WINNEBAGO, WIS.—We are officially advised that the bids received on Nov. 1 by the State Board of Control, Madison, for constructing a hospital for the criminal and violent insane, have been rejected. New bids will be received some time in the near future. M. J. Tappins is Secy.

VIRGINIA, MINN.—Improvements are planned by Harry Solberg, owner, to the Tower Hotel. An addition, 43 × 50 ft., will be built, making the whole structure 50 × 125 ft. The plans were prepared by F. L. Young & Co., Palladio Bldg., Duluth.

ST. PAUL, MINN.—The contract for the general construction of the pressed brick and cut stone residence, which Horace H. Irvine will build on Summit Ave., has been awarded to JOHN M. CARLSON, 237 West Fifth St., city. Plans were prepared by William C. Whitney, 311 Nicollet Ave. Cost, $60,000.

OMAHA, NEB.—J. L. Brandeis & Sons plan the construction of two buildings, one on the lot east of the American Music Hall, and the other at 1612 Farnum St. A subway will be built to connect the two structures. Emil Brandeis is one of the officers.

LEXINGTON, MO.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 19, for the construction, complete (including plumbing, gas piping, heating apparatus and electric conduits and wiring) of the U. S. post-office at Lexington.

SAN LEON, TEX.—A military school is to be constructed at San Leon on the Galveston Bay. The plans have been prepared by the C. D. Hill Co., Archs., Wilson Bldg., Houston. The building will be quadrangular in shape, inclosing a hollow square, which will be used as drill grounds. There will be 103 living rooms. Each will have steam heat, electric light, toilet, lavatory and shower. The building will be of brick and concrete and will be fireproof throughout. Separate plants for the generation of power for lights and for water purposes will be erected on the grounds. Prof. J. M. Carlysle, Mgr. of the Military School at Arlington, is interested. Bids will be received soon. The cost is estimated at $100,000.

TEMPLE, TEX.—Plans have been prepared for the proposed Harvey Hotel, to be known as the "San Jacinto," to be erected by the Atchison, Topeka & Santa Fe Ry. Co. E. P. Ripley, of Chicago, Ill., is Pres. Estimated cost, $150,000.

SEATTLE, WASH.—The contract for furnishing 90,000 yds. of plastering in the $1,000,000 Providence Hospital, now in course of construction at 17th and East Jefferson St., has been awarded to E. C. McDOUGALL & CO., Arcade Annex, by P. A. Bailllargeon.

TACOMA, WASH.—We are officially advised that the contracts to construct the railroad terminal at Tacoma, for the Tacoma Railroad Terminal Co., have been awarded to V. J. HEDDEN & SONS CO., 1 Madison Ave., New York, and MACARTHUR BROS. CO., 11 Pine St., New York. It will be fireproof, of steel, stone and brick construction, 24 stories high and 1,000 × 1,000 ft. F. M. Andrews & Co., 1 Malison Ave., New York, are the Archs. Estimated cost, $50,000,000.

PORTLAND, ORE.—We are officially advised that the NORTHWEST STEEL CO., of Portland, has been awarded the following contracts: For the steel frame of the Corbett Estate & O'Shea Bros. Building, for Lipman, Wolfe & Co., this city; and for the steel frame on the Wilcox Building, this city. About 1,000 tons of standard sections and 1,000 tons of Bethlehem sections, will be involved in the former, and about 1,000 tons of Bethlehem shapes in the latter. Both these contracts are for 1911 delivery.

Knighton & Root, Archs., Commercial Club Bldg., are drawing plans for a pressed brick and stone apartment building, 100 × 100 ft., at the corner of St. Clair and Washington Sts., to cost $75,000. The apartments will be erected for E. J. Frohman and will contain 180 rooms. Plans to be completed about Dec. 1.

Dr. George A. Houseman is planning to build a brick apartment house on his recently acquired property, located on Hoyt st., between 22d and 23d Sts. Estimated cost, $40,000.

Plans have been completed for a 4-story brick apartment house at 21st and Washingtons Sts., by Bennes & Hendricks, Archs., Labbe Bldg., and the contract has been awarded to J. C. WINTERS & CO. Work will begin at once. Cost, $75,000.

FORT WINFIELD SCOTT (San Francisco post-office) CAL.—The date for receiving bids for the construction and completion of five single barracks at Fort Winfield Scott, has been postponed from Nov. 18 to 11 a. m., Nov. 30. Maj. George McK. Williamson is Q. M., U. S. A.

LOS ANGELES, CAL.—The Board of Supervisors has commissioned Hudson & Munsell, Archs., Stimson Bldg., to prepare plans for a 5-story reinforced concrete surgical building, 130 × 100 ft., to be erected on the grounds at the County Hospital; also for a 2-story brick stable building, 38 × 100 ft.

SACRAMENTO, CAL.—The Southern Pacific Co. plans the erection of a railway depot, on a site, which is now a sand lot from Third to Fifth Sts., opposite I St. The cost, including furniture, etc., will be $500,000. W. Hood, of San Francisco, is Ch. Engr.

Bids will be received until Dec. 5, we are officially advised, by R. A. Herold, Arch., Bryte Bldg., for the construction of a 4-story steel, brick, stone and concrete court-house. Cost, $500,000.

SAN DIEGO, CAL.—The directors of the Panama California Exposition Society have chosen Balboa Park, near San Diego, as the site for the exposition to be held here in 1915. John C. Olmstead, Arch., of Boston, Mass., has been selected as supervising architect, and will arrive here soon to begin the work of laying out the park and buildings. John Galen Howard, Arch., 6[illegible] Mission St., San Francisco, will be associated with Mr. Olmstead.

SAN DIEGO, CAL.—Harrison Albright, Arch., Laughtin Bldg., Los Angeles, has been commissioned to prepare plans for a hotel to be erected at Nuvida Springs, near San Diego, for S. Dupont and associates. It will be of reinforced concrete. Estimated cost, $100,000.

VENTURA, CAL.—Norman F. Marsh, Arch., Broadway Central Bldg., Los Angeles, has been commissioned by the Board of Trustees of the Ventura High School district to prepare plans for a high school building of reinforced-concrete construction. Estimated cost, $75,000.

MONTREAL, QUE.—The Board of Control recently adopted a report recommending that $40,000 be spent in re-building the small-pox hospital located on Morcan St. Peter Lyall, Board of Trade Bldg., is interested.

QUEBEC, QUE.—The Government plans to replace the present immigration buildings here, with new structures, it is stated. W. D. Scott, is Supt. of Immigration, Ottawa, Ont.

TORONTO, ONT.—The clubhouse of the Hunt Club, which was recently destroyed by fire, is to be rebuilt. At a meeting, a committee consisting of the following was appointed to secure plans, etc.: D. D. Mann, Stephen Haas, Hume Blake, Gordon Osler, A. O. Beardmore, R. J. Christie, Edmund Bristol, M.P., and George W. Beardmore. Estimated cost, $75,000.

NEWMARKET, ONT.—The Office Specialty Mfg. Co. has let the contract for its proposed building here to JOHN L. YOUNG, of Stratford, Ont., at $76,000. Plans were prepared by O. E. Tench, Arch., of Newmarket.

TORONTO, ONT.—The PURDY, MANSELL CO. has received the contract for ventilating the Parliament buildings at $51,800.

WINNIPEG, MAN.—Plans have been prepared by W. G. Beach, 2 McLean Block, for the erection of an office building, six stories high, 62 × 148 ft., of brick and stone, for Charles E. Coling. Bids will be received some time during December. Estimated cost, $135,000.

SASKATOON, SASK.—The Congregation of the Third Ave. Methodist Church, has decided to erect a new church, at a cost of approximately $100,000. Plans will be ordered at once.

CAMPBELLTON, N. B.—The Trans-Continental Ry. Co., plans to erect larger buildings here, it is reported, at an estimated cost of $200,000. G. Grant, of Ottawa, Ont., is Ch. Engr.

VANCOUVER, B. C.—George J. McKenzie, representing Klaw & Erlanger, who left Seattle for Vancouver recently, stated that a preliminary survey is being made on the site for the proposed $250,000 theater building at Dunsmuir and Seymour Sts., in Vancouver. Excavation work will start soon.

NANAIMO, B. C.—R. S. Desrochers, Secy. Dept. Pub. Works, Ottawa, Ont., will receive bids until 4 p. m., Nov. 28, for the erection of a public building here.

NELSON, B. C.—R. S. Desrochers, Secy. Dept. Pub. Works, Ottawa, will receive bids until 4 p. m., Nov. 28, for a public building to be erected here.

GALGARY, ALTA.—The City Engineer is preparing plans for a market building, to cost $50,000. W. D. Spence is City Clk.

WATER SUPPLY—IRRIGATION.

(**Denotes that this work is advertised in Engineering News.*)

*PITTSFIELD, MASS.—Bids will be received by the Board of Public Works, addressed to the Clerk, until 2 p. m., Dec. 12 for constructing a dam and reservoir. The location of the dam and reservoir to be built is in the town of Washington, Mass., about seven miles in a southeasterly direction from Pittsfield. The main portion of the dam will consist of cyclopean stone concrete masonry, faced with concrete blocks or ashlar on the upper side, with concrete core-walls at the ends. The site of the reservoir above the dam is to be cleared and grubbed and soil is to be removed. A road about 8,500 ft. in length is to be constructed and about 16,000 ft. of diversion conduits are to be constructed for the purpose of diverting water into the proposed reservoir. Some of the diversion conduits will be open channels, some vitrified pipes and some concrete. The principal items required in the construction of the work will be about 47,000 cu. yds. of masonry, about 85,000 cu. yds. of earth excavation, about 9,600 cu. yds. of rock excavation, about 45 acres of clearing and grubbing, about 4,000 lin. ft. of 12, 20, and 24-in. vitrified pipe, and about 1,300 cu. yds, of paving. A. B. Farnham is Engr. Bd. Advertised last week.

PROVIDENCE, R. I.—Bids are asked by the Board of Contract and Supply until 2 p. m., Nov. 21, for furnishing and delivering to the Department of Public Works in the city yard, South Providence, the following water-works supplies: Fire hydrants, water gates, pig lead and lead pipe and special-castings. W. C. Pelkey is Clk.

NEW YORK, N. Y.—Bids were received as follows on Nov. 2 by Henry S. Thompson, Comr., Water Supply, Gas and Electricity for furnishing and delivering c. i. pipe, special castings and valve-box castings: (a) Section 1; (b) Section 2; (c) Section 3: Florence Iron Works, (a) $21.95; $47 and $41.50; (b) $22.10; $48 and $42; (c) $22.85; $48.50 and $42.60. U. S. Cast Iron Pipe and Foundry Co., 71 Broadway, New York, (a) $22.40; $46.50 and $45.50; (b) $23.40; $48 and $47; (c) $23.90; $49 and $48. Warren Foundry and Machine Co., (a) $21.90; $46 and $46; (b) $22.70; $43.50 and $43.50; (c) $24; $50 and $50. W. J. Drummond., (a) $21.34; $48 and $42.50; (b) $22.80; $48.50 and $43; (c) $24.15; $48.50 and $43. John Fox & Co., (a) $21.60; $45.50 and $42.; (b) $22.30; $45.50 and $43. (c) $23.40; $45.50 and $42. Standard Cast Iron Pipe & Foundry Co., Bristol.

Pa., (a) $21.56; $25.65 and $38.95; (b) $21.94; $46 and $38.80; (c) $22; $46.10 and $38.90.

Bids were received same date, as follows, for furnishing, delivering and laying water mains and appurtenances in various streets in Borough Park, Lefferts Park, Mapleton and Coney Island districts, Borough of Brooklyn, Nov. 2: James MacAvoy, Astoria, L. I., N. Y., $67,013; James P. Graham, $68,074; Jno. K. Kelley, $73,459; Henry E. Fox, $72,7[illegible]; Sorracei Contracting Co., $68,922; Newman & Carey, $76,239; Cranford & Co., $74,7[illegible]; Frank J. Gallagher, $76,372; Robt. Carter & Co., $70,369; John F Higgins, $72,179; J. J. Shea, $76,512; Cornell Contracting Co., $6[illegible],186; Louis D. Gregory, $68,601.

TRENTON, N. J.—The Water Board will erect at Prospect St. and Ingham Ave. the proposed filtration plant. Work will begin soon. The plant will probably be of the sand and mechanical type with a daily capacity of 30,000,000 gallons. A. Swan, Jr., is City Engr.

MASONTOWN, PA.—The citizens have voted $25,000 of bonds for the construction of water-works and a sewerage system.

PITTSBURG, PA.—The citizens on Nov. 8 voted to issue $3,100,000 of water bonds as follows: For the erection of a new pumping station, $800,000; acquirement of land for the construction and equipment of a new reservoir on the Northside, $1,200,000; repairs and replacements to the several water pumping stations, $100,000; work in the water reservoir at the filtration plant, $200,000; purchase of certain water lines owned by private water companies, and for entering into contracts with private water companies to furnish water to certain consumers at rates not exceeding the city rate, $100,000; payment of balance due to the T. A. Gillespie Co. for the construction of the filtration plant, $700,000. N. S. Sprague is City Engr.

MONESSEN, PA.—We are officially advised that Chester & Fleming, Consulting Engrs., Pittsburg, have been employed by the Monessen Water-Works Co., Monessen, to improve and extend its water filtration plant.

*WASHINGTON, D. C.—Bids were opened on Nov. 9 by the Commissioners of the District of Columbia, for furnishing c.-i. water pipe and water pipe specials, as follows: (a) 8.5 tons of 16-in. pipe, with shell .90 ins. thick; (b) 499.6 tons of 30-in. pipe, with shell 1.01 ins. thick; (c) 22.3 tons of 16 and 30-in. water pipe specials, in accordance with drawings and specifications of New England Water-Works Association; (d) same as (c) in accordance with standard patterns and drawings of the Commissioners: U. S. Cast Iron Pipe & Foundry Co., 71 Broadway, New York, (a) $23.47 per ton; (b) $23.47; (d) $34.30; Camden Iron Works, Camden, N. J., (a) $23.17; (b) $22.17; (c) $53.50. Standard Cast Iron Pipe & Foundry Co., Bristol, Pa., (a) $26.75; (b) $26.75; (c) $52.80. Weatherly Foundry & Machine Co., Weatherly, Pa., (c) $70.12. Lynchburg Foundry Co., Lynchburg, Va., (a) $23.18; (b) $23.18; (d) $52.86.

CHASE CITY, VA.—The city has selected J. Kent White, Waynesboro, Va., to prepare plans and specifications for the construction of water-works and an electric light plant. Estimated cost, $20,000.

HIGHLAND PARK (Richmond post-office), VA. — The city has awarded the contract to I. J. SMITH & CO., Richmond, for wells, trenches and pumphouse in connection with the construction of the water-works at $4,885. The Glamorgan Pipe & Foundry Co., Lynchburg, Va., was the lowest bidder at about $25,000 for hydrants, pipe and valves.

DARLINGTON, S. C.—The Darlington Water & Electric Co. will construct a water-works system of 3,000,000 gallons capacity and a brick and concrete pumphouse and pit; also a 500,000-gallon brick reservoir, and will install two steam and two electric pumps. W. W. Crocheron is Engr.

TIMMONSVILLE, S. C.—The city will receive bids until Dec. 7 for furnishing and constructing water-works requiring a brick reservoir, pumping station, deep well, steel tank and about five miles of 4, 6 and 8-in. pipe. Estimated cost, $40,000. J. N. Johnston is Engr., Florence, S. C.

DOUGLASVILLE, GA.—The City Council, on Oct. 25 passed a resolution authorizing an election for voting bonds to build a water-works system.

JACKSONVILLE, FLA.—Bids were received as follows on Nov. 4 by the Board of Bond Trustees for a 10-in. artesian well, 980 ft. deep: Hughes Special Well Drilling Co., Charleston, S. C., $4.50 per ft.; Snyder Pump & Well Co., Richmond, Va., $3.75; Southern Contracting Co., Lakeland, Fla., $3.49; Ohio Well Drilling Co., $3.55. R. N. Ellis is Supt. W-Wks.

BENTON, MISS.—The city has had plans prepared by C. R. Berry, Benton, for drilling an artesian well of 1,000,000 gallons capacity; William Young, Jackson, Miss., is Engr.

HAMILTON, OHIO.—Contract was awarded by the Board of Control on Oct. 29 to the LYNCHBURG FOUNDRY CO., Lynchburg, Va., for 4, 6 and 8-in. c.-i. water pipe and fittings at $23.15 a ton for pipe and $50 a ton for fittings.

TOLEDO, OHIO.—The city is having plans prepared for the extension of the filtration plant for the city water supply, including a 12,000,000-gallon clear water reservoir, additional engine, pump and gas producers. T. M. Babcock is City Clk.

COSHOCTON, OHIO.—Bids will be received until Nov. 26 by Farley Cofferty, Dir. Pub. Ser., for installing eleven 10-in. driven wells and connections with the present 20-in. suction line, by laying about 220 ft. of c.-i. 20-in. pipe and 316 ft. of 6-in. c.-i. pipe valves, etc. L. E. Chapin is Engr., Canton.

NILES, OHIO.—Bids for water-works supplies were received on Oct. 19. Contracts have been awarded to the following: To U. S. CAST IRON PIPE & FOUNDRY CO., 71 Broadway, New York, for pipe; R. D. WOOD & CO., 400 Chestnut St., Philadelphia, Pa., for hydrants; KENNEDY VALVE CO., for valves; STAMBAUGH THOMPSON CO., for lead and hemp.

CANTON, OHIO.—We are officially advised that the lowest bid submitted to the city on Nov. 10 for 800 tons of pipe and 10 tons of castings was that of the Massillon Iron & Steel Co., Massillon, Ohio. Roy F. Harbert is Dir. Pub. Ser.

PORTSMOUTH, OHIO.—The citizens, on Nov. 8, voted to issue $300,000 of bonds for the construction of new water-works.

SUGARCREEK, OHIO.—We are officially advised that the city voted bonds on Nov. 8 for the construction of water-works. Estimated cost, $12,500. W. A. Hahn is Corporation Clk.

MUNISING, MICH.—The city is considering the construction of a system of water works. W. G. Kirchoffer, Madison, Wis., is Consult. Engr.

GRAND RAPIDS, MICH.—Hering & Fuller, Consult. Engrs., 170 Broadway, New York are completing plans for water filter plant and filter equipment for the city. Bids will be received in January.

SAGINAW, MICH.—Bids are asked by the city until 7.30 p. m., Nov. 18, for the new intake and pump well at the east side water-works.

McLEANSBORO, ILL.—The City Council on Nov. 4 awarded the contract for constructing the reservoir and water-works spstem to RETZEL & CHIPMAN, Evansville, Ind., at $19,934.

CHICAGO, ILL.—Plans for overhauling and reorganizing the water-works system of the city are being outlined by John Ericson, City Engr., and Henry A. Allen, Consulting Eng.

EAST ALTON, ILL.—The village is considering the construction of a water-works system.

NORTH MANKATO, MINN.—The village is considering the installation of a water-works system.

MINNEAPOLIS, MINN.—Henry Knott, City Clk., will receive bids until Nov. 25 for one or two electric driven centrifugal pumps, for the Water-Works Department. Andrew Rinber is City Engr.

KINSLEY, KAN.—We are officially advised that bids were received by Paul Noble, City Clk., on Nov. 7 for furnishing material and laying water pipe with hydrants, valves, etc., approximately 2,500 ft. of 6-in. and 11,250 ft. of 4-in. c. i. pipe, eight hydrants and twelve valves. Contract has been awarded to MARSHALL BROS., Los Aninas, Colo.

ALTOONA, KAN.—We are offcially advised that plans are being prepared by the J. S. Worley Co., Consulting Engrs., Reliance Bldg., Kansas City, Mo., for the construction of water-works here.

COLDWATER, KAN.—The J. S. Worley Co., Reliance Bldg., Kansas City, Mo., we are officially advised are preparing plans for water-works and a light plant for the city

STAFFORD, KAN.—Plans have been completed, we are officially advised by the J. S. Worley Co., Reliance Bldg., Kansas City, Mo., for water-works and light plant improvements here.

WYNOB, NEB.—The citizens have voted in favor of issuing $8,000 of bonds for the construction of water-works.

MANDAN,, N. DAK.—Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., have completed plans for water-works improvements here. Estimated cost, $65,000.

SHOSHONI, WYO.—The State Engineer, Cheyenne, has approved the water rights and the State Land Board has approved the segregation of lands for the project of the Riverside Irrigation Co., which proposes to reclaim 150,000 acres of land near here. The company will install a pumping plant on the Big Horn River, 18 miles above Boysen, from which place it will obtain its electric power. The main canal will be 20 miles long.

STEVENSVILLE, MONT.—The McKellar Creek Reservoir Co., Stevensville, is planning to drain two small lakes at the foot of St. Mary's Peak to secure a supply for irrigation purposes.

GRANBY, MO.—Michel, Cook & Co., Joplin, Mo., are preparing plans for the construction of water-works. Estimated cost, $18,000.

COLUMBIA, MO.—The city has sold $125,000 of bonds for water and light improvements.

PECOS, TEX.—Dr H. H. Harrington, Dir. State Experiment Stations, has plans for draining and irrigating an 80-acre tract of land. M. L. Swinehart of Pecos has been engaged to make cantour surveys, locate canals, laterals, etc.

MUNDAY, TEX.—The City has voted $10,000 of water-works bonds.

DENNISON, TEX.—Bids are asked by the city until Nov. 23 for furnishing pumping machinery to be installed in the proposed pumping station at Shawnee reservoir. W. W. Berry is Supt.

DALLAS, TEX.—The city has awarded the contract to the HUGHES-O'ROURKE CONSTRUCTION CO., Dallas, for constructing the pumping station at White Rock reservoir at $30,050. The foundation of all walls and of engine-room will rest upon solid rock. The basement 50 × 60 ft., and 13 ft. deep, will be provided for two pumping engines. The building will be 50 × 134 ft. A traveling crane will be installed for handling machinery. J. M. Preston is City Eng.

DECATUR, TEX.—See item under Light and Power plants.

CHEROKEE, OKLA.—The city proposes to make extensions to the water-works and electric-light plant. A. J. Titus is Mayor.

OKLAHOMA CITY, OKLA.—We are officially advised that the city has retained Alexander Potter, Consult. Engr., 114 Liberty St., New York, to investigate the question of a suitable water supply. The city has a population of 65,000, but the commission includes an investigation of such sources as will be suited for a city of 200,000 population. Plans will be completed in about three months.

MUSKOGEE, OKLA.—The city, we are officially advised, has engaged Alexander Potter, Consult. Engr., 114 Liberty St., New York, to investigate the question of a suitable water supply to meet the demands of the city and to devise a comprehensive system of sewerage and sewage disposal covering an area which will permit the city to grow to a population of 150,000. Plans will be completed in about three months.

NORTH YAKIMA, WASH.—Bids will be received by the Project Engineer, U. S. Reclamation Service, until Dec. 3, for the excavation of about 73 miles of sublaterals, Tieton unit, of Yakima project, Wash.

SULTAN, WASH.—Contract, it is stated, has been awarded to P. E. CUNNINGHAM, Sultan, for constructing the water-works at $11,995. Other bidders were: H. T. Vogelsberg, Seattle, $12,900; Collins & Steuding, Snohomish, $13,900.

WALLA WALLA, WASH.—The Council has passed an ordinance providing for laying water-mains in various streets.

*SEATTLE, WASH.—Bids will be received by the Board of Public Works until 10 a. m., Dec. 13, 1910, for the sale of the following: One Holly pump, capacity, 5,000,000 gallons; two Worthington pumps, capacity 2,000,000 gallons each; two Worthington pumps, capacity 1,000,000 gallons each; one Dow pump, capacity 2,000,000 gallons; one Dow pump, capacity 1,250,000 gallons; one Dow pump, capacity 500,000 gallons; six 16-ft tubular boiler, capacity 95 HP. each; two 14-ft. tubular boilers, capacity 150 H.-P. each; one 16-ft. boiler, capacity 125 H.-P.; one 16-ft. boiler, capacity 75 HP.; together with attachments for the above, and a lot of supplies and tools, a list of which can be obtained from C. B. Bagley, Secy. City Hall.

NORTH YAKIMA, WASH.—Bids for the construction of 40 miles of main lateral under Unit No. 3 of the Tieton project were opened on Oct. 29 by the U. S. Reclamation Service, North Yakima, as follows: George Cook & Sons of Spokane, $150,000; D. H. Traphagen, Hotel Lincoln, Seattle, $125,000; Nelson Rich Prosser, Wash., $115,000.

ELTOPIA, WASH.—E. J. McKinley, Eltopia, will install a pumping plant on land about 160 miles from here for irrigation purposes.

CRESWELL, ORE.—R. H. Parsons & Co. will erect a tower and tank near their planing mill to be used by the city water system. The water mains will be extended to Stratford and Willour additions.

JACKSONVILLE, ORE.—All bids for the construction of a new water system have been rejected by the City Council.

LAKEVIEW, ORE.—James L. Wheeler, Jr., Lakeview, will construct a reservoir with a capacity of 2,880 acre-ft.

ESCONDIDO, CAL.—The city is considering the construction of a municipal water system.

SAN JACINTO, CAL.—Williams & Coffen, Los Angeles, principal owners of the Citizens Water Co., which has taken over the property of the San Jacinto Valley Water Co., plan to enlarge and improve the system. At Cienega additional wells will be sunk and underground flume extended and deepened.

LOS ANGELES, CAL.—A contract has been awarded to W. S. HEWITT & CO., Los Angeles, for the construction of a large dam in Yucaipa Valley. Estimated cost, $12,000.

The Board of Water Commissioners will receive bids until 3.30 p. m., Nov. 21, for high pressure bell and spigot and lug c.-i. water pipe and fittings.

ATHOL, IDAHO.—The Athol Water & Light Co., Athol, has been incorporated with a capital stock of $10,000. The incorporators are: D. D. Drennan, Harry Kaye and H. H. Rawlings.

WESTON, ONT.—The city is considering plans for treatment for the purification of the water supply. Sand filtrations and mechanical filtering have been suggested.

TORONTO, ONT.—Bids will be received by the Board of Control until noon, Nov. 22, for a 10-ton hand-operated, traveling crane, at the high level pumping station, and a 15-ton, hand-operated, traveling crane, for the main pumping station. C. H. Rust is City Engr.

DAUPHIN, MAN. — The CANADA IRON CORPORATION has secured contract for iron pipe for the water system here. Noted on Oct. 27.

POINT GREY, B. C.—It is reported that bids will be asked soon for the construction of the first compartment of the city's large reservoir system, which will eventually contain six compartments giving a capacity of 18,000,000 gallons of water.

SEWERS.

(* *Denotes that this work is advertised in Engineering News.*)

NORWAY, ME.—Plans and specifications are being prepared by Stephen Litchfield, Civil Engr., for the construction of a sewer system.

BOSTON, MASS.—Bids will be received until Nov. 21 by L. K. Roberts, Supt. of Streets, for surface drains in Emmons Rd., etc.

SHELBURNE FALLS, MASS.—The City Council has received estimates from A. H. Beers, Whately, for the installation of a sewer system to accommodate residents on Buckland side. The estimated cost is $23,500.

PROVIDENCE, R. I.—Bids will be received by the Board of Contract and Supply until 2 p. m., Nov. 21, for the furnishing of all necessary material in the construction of sewers, including 14,500 ft. of pipe; also cement, granite and flagstones.

PROVIDENCE, R. I.—The four contracts have been awarded to F. E. SHAW for the construction of sewers in Silver Lake and in Union Ave., in Allen Ave. and Public St., in Rodman St. and in Everett Ave. The contract for the sewer in Atwell Ave. has been awarded to CHARLES CRANKSHAW.

MIDDLETOWN, CONN.—The construction of main carrier sewer in the Naugatuck River, from the Washington Ave. Bridge to the bridge over the river at West Main St., is being considered.

ANSONIA, CONN.—Bids for the construction of Section D of the Ansonia sewer system will be received at the office of the Board of Sewer Commissioners, City Hall, until 8 p. m., Nov. 17. V. B. Clarke is Engr. Advertised last week.

BROOKLYN, N. Y.—Bids will be received until 11 a. m., Nov. 23, by Alfred A. Steers, Pres. of the Boro. of Brooklyn, for the construction of sewers in various streets and avenues.

FAIRPORT, N. Y.—The contracts have been awarded by the Village Board of Construction to WAGNER & DANCY, East Rochester, for the construction of the sewers in South Main and Park Sts.

ROCHESTER, N. Y.—The construction of intercepting sewers is under consideration by the Common Council. The East Side intercepting sewer will begin in Central Ave. at North Water St. The West Side intercepting sewer will start at Glendale Park and cross the river at Deep Hollow.

SYRACUSE, N. Y.—The construction work of a sewer in Essex and Olive Sts. will soon commence. Henry C. Allen is City Engr.

BUFFALO, N. Y.—The Common Council has authorized the construction of sewers in various streets and roads. F. G. Ward is Comr. of Public Wks.

NEWBURGH, N. Y.—The construction of sewers in several streets is contemplated by the City Council. N. Drew is Supt. of Sewerage.

NEW YORK, N. Y.—Bids received by the President. of the Boro. of Queens for the construction of sewers in various streets and avenues were as follows: (a) Lefferts Ave., from Liberty Ave. to Ulster Ave., Fourth Ward; (b) Lefferts Ave., from Ulster Ave. to Rockaway Rd., and a storm water sewer and appurtenances in Rockaway Road, from Lefferts Ave. to Panama St.; (c) Panama St. from Blake Ave. to Rockaway Road, Fourth Ward; (d) Panama St., from Vienna Ave. to Blake Ave., Fourth Ward; (e) Panama St., from Cozine Ave. to Vienna Ave., Fourth Ward; (f) constructing a temporary open drain in Panama St., from Jamaica Bay to Cozine Ave., Fourth Ward; (g) Seneca (Covert) Ave., from De Kalb Ave., Putnam Ave. and from Cornelya St. to Myrtle Ave., in Himrod St., from Seneca Ave. to the Brooklyn Borough line, and in Putnam Ave., from Seneca Ave. to Myrtle Ave., Second Ward; (h) constructing a temporary receiving basin on the east side of Kneer Ave. at the L. I. R. R. and one on the west side of Kneer Ave. at the Long Island R. R., at Far Rockaway, Fifth Ward, Boro. of Queens: Gifford & Weston, (a) $101,745, (b) $121,255 (c) $77,514, (d) $61,242; William Kelly, (a) $59,597, (b) $86,400, (c) $60,057, (d) $55,156, (e) $90,253, (f) $52,915; Clancy & Van Alst, (a) $69,345; Thomas G. Carlin, (a) $59,130, (b) $77,758; J. J. Shea, (a) $92,951, (b) $112,115, (c) $101,728, (d) $78,249; O'Rourke Engineering & Construction Co., (a) $94,608, (b) $117,775, (c) $92,534, (d) $78,170, (e) $103,712, (f) $95,215; Litchfield Construction Co., (a) $66,624; H. J. Mullen, (a) $74,125, (b) $86,720, (c) $67,205, (d) $60,355, (e) $97,750, (f) $60,280, (g) $72,639; H. B. Dady, (a) $95,947, (b) $115,125, (c) $89,695, (d) $82,375, (e) $143,040, (f) $75,774; Peace Bros., (a) $68,021, (b) $88,132, (c) $66,253, (d) $60,885, (e) $113,797, (f) $77,843; (g) $81,026; Green Construction Co., (a) $67,685; Leo E. Kelly, (b) $112,342, (c) $63,584, (d) $82,389, (f) $83,725; Cream & Myeers, (b) $96,675, (c) $65,808, (d) $60,440; Hicks-Johnson Construction Co., (c) $65,738, (f) $66,558, (g) $58,954; King, Caney & King, (c) $78,289; Phoenix Construction Co., (d) $38,498, (e) $94,579, (f) $68,627; Newman & Carey Co., (a) $66,953; Walter J. Ford, (g) $66,118; P. P. Farley, (e) $115,230; F. P. Long & Co., (f) $59,692. No bids were received for (h).

SOUTH AMBOY, N. J.—The bids received by the City Council for the construction of section 2 of sanitary sewers were as follows: J. B. La Rorke, Boston, $49,350; Fusco Construction Co., $43,720; Liddle, Pfeifer & Co., Perth Amboy, $40,575; Cantwell Construction Co., Philadelphia, $33,440; Johan Jensen, Perth Amboy, $29,050; P. J. Monaghan, South Amboy, $26,750.

CLIFTON, PA.—The construction of a sewerage system and water-works is under consideration. The estimated cost is $52,700.

SHARON, PA.—The American Steel Foundries Co. has awarded the contract to WILLIAM McINTYRE for 3,500 ft. of 12-in. sewer. The sewer will be laid on Sharpsville St., from Hall to McClure Ave.

ERIE, PA.—A sewer system will be constructed in Third, Fourth, Wallace and Parade Sts., connecting with the new Mill Creek intercepting sewer system.

ERIE, PA.—The contract has been awarded to CLEMENT WOLFRAM for the construction of a 9-in. sewer in Holland St., from 28th St. south 500 ft.

ARLINGTON, MD.—The construction of a sewer system for Arlington Heights and Denmore Park is under consideration. Patrick Flanigan, 120 East Lexington St., Baltimore, is interested.

BALTIMORE, MD.—Bids opened on Nov. 2 by the Board of Awards for lateral sewers in district 34-A, are as follows: The Whiting-Middleton Construction Co., Sexton Bldg., Baltimore, Md., $85,461; B. F. Sweeten & Son, 820 Sharp St., Baltimore, Md., $104,578; Iron Brothers, 330 N. Gay St., Baltimore, Md., $108,913; D. V. Ault & Co., Knickerbocker Bldg., Baltimore, Md., $110,064; William McCarthy & Co., American Bldg., Baltimore, Md., $114,063; Ryan & Reilly, American Bldg., Baltimore, Md., $121,845.

ROANOKE, VA.—Bids will be received by W. L. Craft, City Clk., until noon, Nov. 23, for the construction of the sewer so as to accomodate the properties abutting on south side of Madison Ave., between Fourth St. and Elk Run. Plans and specifications may be obtained from the office of F. L. Gibboney, City Engr.

FARMINGTON, W. VA.—The contract will soon be awarded for the construction of 600 ft. of 12 and 18-in. sewerage paving. Allen & Rohr, Jacob Bldg., Fairmont, W. Va., are engineers.

GREENVILLE, S. C.—The contract has been awarded to SULLIVAN & LONG for the installation of about six miles of sewer extension.

TIMMONSVILLE, S. C.—Bids will be received until Dec. 7 by the Commissioner of Public Works for the construction of a storm water drainage system. R. C. Collins is City Clk.

EASTMAN, GA.—Bids opened by the Mayor on Nov. 1 for the construction of 9 miles of terra cotta pipe sewers are as follows: Newman Sewer Construction Co., $24,925; Municipal Engineering & Construction Co., $21,202; M. P. Flynn & Co., Chattanooga, Tenn., $20,870; Carolina Construction Co., Florence, S. C., $19,900; Sullivan & Long, $21,698; I. C. Mishler, Chattanooga, Tenn., $22,026; P. J. Curran, $22,068; Mann & Garvey, Knoxville, Tenn., $22,116; George H. Crafts & Co., Dublin, Ga., $22,184; Charleston Engineering & Construction Co., $22,377; Noll Construction Co., Chattanooga, Tenn., $22,937; John R. Jeffrey, Elberon, N. J., $25,323; J. H. Hargrove & Son, $25,998; George H. Palmer, $15,912; M. Benner, Marion, Ind., $17,022; Dysard Construction Co., Atlanta, Ga., $17,998; Abee Bros. & Hart, $18,102; J. D. Cranford & Co., $20,397; J. Whitt Gurley & Co., $19,553; Brayan & Co., $18,652; Edwards Construction Co., $18,603. Arthur Pew. 619-220 Temple Court, Atlanta, Ga., is the Engr.

ATLANTA, GA.—The following bids have been received for the construction of the city sewerage disposal plant at Proctor Creek: Interstate Construction Co., $121,277; Municipal Engineering & Construction Co., $121,684; C. W. Lane & Co., $150,403; Gude & Co., $190,180; Piedmont Construction Co., $144,575, and Nichols Construction Co., $139,214.

TUSCALOOSA, ALA.—The contract has been awarded to the TUSCALOOSA CONCRETE & SUPPLY CO. for the construction of 13,755 lin. ft. 8-in. sewer at $6,779. The contract has also been awarded to McCARTIN CONSTRUCTION CO., Birmingham, Ala., for the construction of several storm water sewers.

BIRMINGHAM, ALA.—Construction work will commence soon on the north side storm sewer. The sewer will extend from Norwood to a point beyond Smiths Park and will be in six sections traversing the Second, Third, Fourth and Fifth Wards and will drain an area of approximately 1 sq. mile.

OPELVIESAS, LA.—The construction of a sewerage system is under consideration by Mayor Helphen.

HAMMOND, LA.—The construction of a sewerage system is under consideration by the city.

LOUISVILLE, KY.—Bids for the construction of a sewer known as "Eighth and St. Catherine St. sewers" will be received at the office of Commissioner of Sewerage, 605 Equitable Bldg., Louisville, Ky., until noon, Dec. 2. J. B. F. Breed, Ch. Engr. Advertised last week.

DAYTON, OHIO.—The HALL-CRONIN CO., Dayton, has been awarded the contract for the construction of the storm sewer in Central Ave. and Seventh St., at $22,694.

HAMILTON, OHIO.—THE SCIOTO VALLEY SUPPLY CO., Columbus, Ohio, has been awarded the contract to furnish various sizes of wrought iron pipe, etc., at $16,006.

HAMILTON, OHIO.—The contract for the construction of a storm water sewer from D to C Sts. has been awarded to FRANK J. DAVIES.

HAMILTON, OHIO.—The contract has been awarded to the GAAVER CONTRACTING & TRANSFER CO. for the construction of storm sewers in various streets.

DAYTON, OHIO.—The Board of Control let contract to SHAFER & DILL for the construction of sewers in Districts Nos. 4 and 5 and Germantown District at $35,000. F. J. Cellarius is City Engr.

CINCINNATI, OHIO.—Bids will be received by the Board of Park Commissioners until noon, Nov. 21, for the furnishing of necessary labor and material for the construction of a sewer in Barnet Woods at the foot of St. Clair St. Plans and specifications at the office of the Bd. of Park Comrs.

GALION, OHIO.—The Board of Control has decided to readvertise for bids for the construction of the lateral sewer in the fifth district. The new bids will be received until Dec. 1.

LORAIN, OHIO.—Bids will be received by the Director of Public Service until noon, Nov. 22, for the installation of a sanitary sewer in West 31st St., between Broadway and Lexington Ave.

PIQUA, OHIO.—Bids will be received until Nov. 28 by T. D. McClay, Dir. of Pub. Service, for the installation of sewers in Vine and Lincoln Sts., and in Madison Ave.

DETROIT, MICH.—The Department of Public Works, J. J. Haarer, Commissioner, 104 City Hall, has recommended to the Common Council of Detroit to have the following lateral sewers constructed: No. 2143, in alleys in block bounded by Mountclair, Lemay and Waterloo Sts. and city limits; estimated cost, $1.75 per lin. ft. No. 2159, in alleys in block bounded by McClellan and Cooper Aves. and Moffat and Barker Sts.; estimated cost per lin. ft., $1.60. No. 2163, in alleys in block bounded by Stanford, Hartford, Milford and Moore Pl.; estimated cost per lin. ft., $1.50. No 2162, in alleys in block bounded by Elsemere and Lawndale Aves., Fort St. and Fulton Ave.; estimated cost per lin. ft., $1.60. No. 2164, in alleys in block bounded by Wesson, Grensel Aves. and Otis and Ingersoll Sts.; estimated cost per lin. ft., $1.30. No. 2165, in alleys in block bounded by Reisner, Gaier and Fort Sts. and Forman Ave.; estimated cost per lin. ft., $1.50. Also for the extension of public sewer in Cameron Ave., from Caniff Ave. to Englewood Ave.

FLINT, MICH.—The construction of a sewer is under consideration. Plans and specifications have been prepared.

WYANDOTTE, MICH.—The citizens of this place have voted in favor of issuing $68,000 of bonds for the extension of the sewer to West and South Wyandotte.

LEWISTOWN, ILL.—The Board of Local Improvements has awarded the contract to JAMES E. DAILY, Hammond, Ill., for the construction of the North Side sewer at $15,295. Chas. W. Brown, Jacksonville, Ill., is Engr.

PEKIN, ILL.—We are officially advised that bids for furnishing labor and material for construction of two sewer systems will be received by the Board of Local Improvements of the city of Pekin until 2 p. m., Nov. 23. The Second District Sewer comprises 4.14 miles, and sewers are to be of tile and brick, sizes 8 ins. to 30 ins., 98 manholes, 131 catch basins, one outlet bulkhead, 250 ft. of 12-in. c.-i. pipe. The Third District Sewer comprises 8.15 miles, brick and tile, sizes 8 ins. to 48 ins., 190 manholes, 278 catch basins, one bulkhead and apron, 150 ft. of 16-in. c.-i. pipe.

LEWISTON, ILL.—The contract for the installation of a sewer for the North Side sewer district has been awarded to J. E. Dailey, Hammond.

CHICAGO, ILL.—Bids will be received by the Board of Local Improvements until Nov. 17 for the construction of sewers, water service pipes and drains in various streets and avenues. Albert A. Keeney is Pres.

CARROLLVILLE, WIS.—The contract has been awarded to J. H. WAYLAND for the construction of 1,200 ft. of 6-in. clay pipe sewer.

JANESVILLE, WIS.—ANDREW THOMPSON, of Racine, Wis., has been awarded the contract for laying 5,933 ft. of pipe sewer in several streets of the city.

KENOSHA, WIS.—Bids will be received until 2 p. m., Nov. 18, for the building of sewer stubs and catch basins in Elizabeth St. Plans and specifications at the office of City Engr.

OCONOMOWOC, WIS.—Two miles of concrete and tile sewer will be constructed early in the spring. E. B. Parsons, Watertown, Wis., is Engr.

WATERTOWN, WIS.—This city has decided to construct a sewer system next year. Estimated cost, $10,000. E. P. Parsons is City Engr.

DE WITT, IOWA.—Plans and specifications are being prepared by C. P. Chase, Clinton, Iowa, for the construction of four miles of 8-in. to 15-in. tile. The estimated cost is $25,000.

WEST LIBERTY, IOWA.—The contract for the construction of six miles of sanitary sewer has been awarded to C. R. NICHOLS, Caney, Kan., at $21,874.

LOGAN, IOWA.—The construction of a sewerage system for Logan is under consideration. The estimated cost is $22,000.

DULUTH, MINN.—The construction of a sanitary tile sewer is under consideration by the Board of Public Works. R. McGillvray is City Engr.

ST. PAUL, MINN.—The Board of Public Works will receive bids until 2 p. m., Nov. 21, for the installation of a sewer in Pusey St., from Tallula Ave. to a point 240 ft. north.

ALBERT LEA, MINN.—The contract has been awarded to ILKSTRUP & OKEN, Minneapolis, for constructing a lateral sewer in St. Mary's, Euclid and Adams Sts.

LYONS, KAN.—Plans and specifications for the construction of sewers are being prepared by Burns & McDonnell, Scarritt Bldg., Kansas City, Mo.

LINCOLN, NEB.—Plans for the construction of a sewer system in the alley between Orchard and Peck Sts., from Hull to 33d Sts., have been approved.

DALLAS, TEX.—The construction of a storm sewer between the Houston and Texas Central Ry., Ervay St., Live Oak St. and Ross Ave. has been decided upon. The estimated cost is $20,000. William Doran is St. Comr.

YOAKUM, TEX.—The construction of a sewerage system is under consideration by the Mayor and others.

BARTLETT, TEX.—Surveys are being made for the proposed sewerage plant. The setimated cost is $12,000.

EL PASO, TEX.—Orders have been given to proceed with the construction of the deep sewer from the New Mil's building, south to San Antonio St. Work will be under the direction of F. H. Todd, City Engr.

MUSKOGEE, OKLA.—See item under Water Supply—Irrigation.

MEDFORD, ORE.—Council has passed an ordinance providing for the construction of a 12-in. storm sewer along Grape St., from the alley between Seventh and Eighth Sts., to Eighth St.

PORTLAND, ORE.—The contract has been awarded to WILLIAM LIND for the construction of the Riverside district sewer at $132,200.

MONROVIA, CAL.—The citizens of this place voted a bond issue of $170,000 for the construction of a sewer and water system for the city. The sewer system is estimated at $120,000.

SAN BERNARDINO, CAL.—The City Engineer has been instructed to prepare plans and specifications for the construction of sewers in various streets.

OAKLAND, CAL.—The following bids for the construction of a sewer on Fourteenth Ave. were opened at the meeting of the Board of Public Works on Nov. 2: Cross Construction Co., Hutchinson Co., Michael Murphy, Piedmont Construction Co., Waldee Construction Co., Michael Heafey, Esterly Construction Co., Contra Costa Construction Co., Healy-Tibbetts Co., SCOTT & FARLEY, $13,507 (awarded contract), and Cotton Bros.

IMPERIAL, CAL.—The Board of Trustees will receive bids until noon, Nov. 19, for the installation of sewers in school district building. John McKinney is Clk.

ORANGE, CAL.—The Board of City Trustees has ordered sewers to be constructed in the following streets: Chapman Ave., Cypress, Lemon, Olive, Orange, Grand, Shaffer, Washington, Almond, Center. The work will be done under the Vrooman act. Bids will be called for in about a month.

ROSEVILLE, CAL.—Bids offered for the contract to install the proposed new sewer system for this city were as follows: Latourette & Fioal Co., Sacramento, $48,482; D. W. Pierson, Sacramento, $50,866; John Heaney, Oakland, $53,000; Federal Construction Co., of San Francisco, $57,900; C. D. Vincent, Oakland, $42,835; Contra Costa Construction Co., Oakland, $59,450; Cark & Henry, Sacramento, $75,740. There were also several bids for parts of the contract.

TUCSON, ARIZ.—Bids will be asked soon for supplying the city with 23,000 ft. of sewer pipe and fittings. Plans in office of City Engr.

BRISBEE, ARIZ.—The City Council has authorized the City Clerk to advertise for bids for the following sewer pipe and supplies: 23,000 ft. of pipe, 1,000 Ys, 70 tees, 50 manhole covers and 15 flush tank syphons.

NAMPA, IDAHO.—Plans have been completed for sanitary sewers and sewage purification works at Nampa, Idaho. Bids will be asked in the early spring. Burns & McDonnell are Engrs., Scarrit Bldg., Kansas City, Mo.

BELLEVILLE, ONT.—THOMPSON & DONAHUE have been awarded the contract for the construction of a sewer in Pinnale and Church Sts.

GARBAGE DISPOSAL.

(* *Denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—Bids were received by Louis K. Rourke, Supt. of Streets, on Nov. 10, for the removal of snow and ice in six snow districts, the contractor to furnish teams, horses and men, and to bid on price per cu. yd., dumped at place specified. Contract to cover from Nov. 15, 1910, to Jan. 31, 1911, with privilege to extend to May 1, 1911. Contracts have been awarded as follows: Districts Nos. 1 and 6, to J. C. COLEMAN SONS CO., Roxbury, at 37 or 39 cts. per cu. yd.; District No. 2, to JAMES McGREEVEY, at 33 cts.; District No. 1, to CHARLES J. JACOBS CO., 107 Terrace St., Boston, at 32 cts.; District No. 5, to A. DE STEFANO, East Boston, at 36 cts.

JERSEY CITY, N. J.—Contract was awarded by the Street and Water Board, on Nov. 6, for ash and garbage contract to HENRY BYRNE at $45,000.

PITTSBURG, PA.—The citizens, on Nov. 8, voted to issue $100,000 of bonds to secure land and erect and equip a municipal incinerating or refuse-disposal plant. N. S. Sprague is City Engr.

SEATTLE, WASH.—We are officially advised that the incinerator to be located at Massachusetts Ave. and Seattle Boulevard will be built by day labor. Estimated cost, $50,000. R. H. Thomson is City Engr. Noted on Nov. 3.

PASADENA, CAL.—The contract for sweeping and flushing the streets has been awarded to A. B. COFFMAN by the city. J. S. Van Ornum is City Engr.

CALGARY, ALTA.—The construction of an incinerator is being considered by the city. Estimated cost, $50,000.

STREETS AND ROADS.

(* *Denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—Bids will be received until Nov. 21 by L. K. Rourke, Supt. of Streets, for constructing Addison St.

PROVIDENCE, R. I.—The State Board of Public Works received the following bids on Nov. 9 for constructing three stretches of road in East Providence, West Greenwich and Exeter: East Providence—Joseph McCormick, $4,312; West Greenwich—Joseph Bristow, $4,624; Amos D. Bridges Sons, Hazardville, Conn., $5,540; Lane Construction Corporation, Meriden, Conn., $5,700; Exeter—Lane Construction Corporation, $6,360; and Amos D. Bridges Sons, $5,771.

HARTFORD, CONN.—Bids for the construction of State road work were received at the office of the State Highway Commissioner on Nov. 14, as follows:

Town of Plainfield, 11,230 lin. ft. gravel-telford road, including two 12-in., two 15-in., one 18-in. and one 24-in. tile culverts, and two concrete arch culverts: B. D. Pierce, Jr., Co., Bridgeport, Conn., $1.74 per lin. ft. for gravel, $2.34 for telford, 65 cts. per lin. ft. for rubble drain; Ahern Bros., Norwich, Conn., $2.72, $3.30 and 95 cts.; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $2.13, $2.83 and $1; Eldredge Construction Co., Mystic, Conn., $19,374 for entire grading, $1.99 per lin. ft. for telford extra, 45 cts. per lin. ft. for rubble drain; A. Vito, Thompson, Conn., $2.10, $2.87, $1; Tony Leo, Thompson, Conn., $1.75, $2.60, 97 cts.; William B. Wilcox, Norwich, Conn., $2.35, $2.85, $1; Jones & Polcaro, Willimantic, Conn., $1.70, $2.65, 70 cts.

Town of Redding, 3,241 lin. ft. gravel-telford road on the Norwalk-Danbury Turnpike, including two 12-in. and two 24-in. tile culverts: B. D. Pierce, Jr., Co., Bridgeport, $1.73 per lin. ft. for gravel, $2.47 for telford, 65 cts. for rubble drain, $4.75 per cu. yd. for masonry walls; O. T. Benedict, Pittsfield, Mass., $1.79, $2.39, $1, $6; David Jencks and L. Geopple, Wilton, Conn., $1.73, $2.38, $1; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $1.83, $2.53, [illegible] and $6; B. N. Beard Co., Shelton, Conn., [illegible], $3.07, 75 cts.

Town of Southbury, 5,055 lin. ft. gravel-telford road, including three 15-in. and one 24-in. tile culverts: B. D. Pierce, Jr., Co., Bridgeport, $2.08 per lin. ft. for gravel, $2.60 for telford, 65 cts. for rubble drain; B. N. Beard Co., Shelton, Conn., [illegible], $2.75, $1; F. Arrigoni & Bro., Durham, Conn., $1.99, $2.25, 75 cts.; Goodman & Trumbull, Litchfield, Conn., $1.83, $2.70, $1; Joseph S. Barbara, Southbury, Conn., $1.63, [illegible]83, 98 cts.; C. W. Tryon, Meriden, Conn., $1.44, $1.94, $1; E. G. Pardee, Bethany, Conn., $1.80, $2.50, $1.25; second section, [illegible]00 lin. ft. gravel-telford on the Newtown Road: B. D. Pierce, Jr., Co., Bridgeport, [illegible]5 for gravel, $2.50 for telford, 65 cts. for rubble drain; B. N. Beard Co., Shelton, [illegible], $2, $2.75, $1; F. Arrigoni & Bro., Durham, Conn., $1.99, $2.45, 75 cts.; Goodman & Trumbull, $1.67, $ .50, [illegible]; Joseph S. Barbara, Southbury, Conn., $1.07, $1.85, $2.07; C. W. Tryon, Meriden, Conn., $1.34, $1.85, $1; Sternberg & Cadwell, West Hartford, $2.15, $2.90, $1.25; E. G. Pardee, Bethany, Conn., $1.09, $1.69, $1.25. Third section, 5,970 lin. ft. gravel-telford road, including one 18-in. and six 15-in. tile culverts and one concrete arch culvert: B. D. Pierce, Jr., Co., Bridgeport, $4.32 per lin. ft. for gravel, $6.92 for telford, 65 cts. for rubble drain, $4.75 per cu. yd. for walls; B. N. Beard Co., Shelton, Conn., $2, $2.75, 65 cts., $5; F. Arrigoni & Bro., Durham, Conn., $14,500 (lump sum), with 75 cts. per lin. ft. extra for telford, $5.50 per cu. yd. for masonry walls; C. W. Tryon, Meriden, $2.79, $3.25, $1, $4.95; Sternberg & Cadwell, West Hartford, $3.27, $4.25, $1.25 and $6.50.

Town of Norfolk, First Section, 6,400 lin. ft. graded-telford road, including three 12-in. and three 15-in. tile culverts: O. T. Benedict, Pittsfield, Mass., $11,500 entire grading, 60 cts. per lin. ft. extra for telford, $1 for rubble drain; William Maloney, West Hartford, 11,406, 75 cts., $1; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $9,057, 70 cts., $1; John de Michiel & Bro., Torrington, Conn., $10,875, 90 cts., 95 cts.; Joseph Mascetti, Torrington, Conn., $9,950, 80 cts., 80 cts. Second section, 5,500 lin. ft. graded-telford road on Winsted Turnpike, including three 12-in. and one 20-in. tile culverts: Joseph Mascetti, Torrington, Conn., $8,224 entire grading, with 80 cts. per lin. ft. extra for telford and 80 cts. per lin. ft. for rubble drain; O. T. Benedict, Pittsfield, Mass., $13,000, 60 cts., $1; John De Michiel & Bro., Torrington, Conn., $11,500, 90 cts., 95 cts.; William Maloney, West Hartford, $12,605, 75 cts., $1; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $11,830, 70 cts., $1. Third section, 10,010 lin. ft. graded-telford road on the Torrington Turnpike, including one 12-in., one 18-in., three 15-in., one 24-in and four 20-in. tile culverts and two concrete arch culverts: O. T. Benedict, Pittsfield, Mass., $18,000 for the entire grading, with 60 cts. per lin. ft. extra for telford, $1 per lin. ft. for rubble drain; Town of Norfolk, $12,000, 50 cts., 75 cts.; William Maloney, West Hartford, $20,610, 75 cts., $1; Joseph Mascetti, Torrington, Conn., $19,450, 90 cts., 90 cts.; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $22,305, 70 cts., $1.

Town of Danbury, 5,500 lin. ft. gravel-telford road, including one 12-in. and four 15-in. tile culverts and one reinforced concrete culvert: O. T. Benedict, Pittsfield, Mass., $1.65 for gravel, $2.35 for telford, $1 for rubble drain, $6 for masonry walls; Lane Construction Corporation, Meriden, Conn., $1.15, $1.75, $1, $6; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $1.55, $2.35, $1, $6.

Town of Canaan, First section, 3,000 lin. ft. gravel-telford on the Point of Rocks Road: T. H. Gill Co., Winter Hill Station, Boston, Mass., $2.41 for gravel, $2.71 for telford, 40 cts. for rubble drain, $4.50 for masonry walls; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $2.97, $3.57, $1, $7. Second section, 7,277 lin. ft. gravel-telford on the Huntsville Road, including six 15-in., one 18-in. and one 12-in. tile culverts: B. D. Pierce, Jr., Co., Bridgeport, $2.55, $3.05, 65 cts.; T. H. Gill Co., Boston, $2.41, $2.76, 40 cts.; Joseph Mascetti, Torrington, Conn., $2.50, $3.40, $1.

Town of Huntington, 1,887 lin. ft. graded-telford road, including one 24-in. and one reinforced concrete culvert: William Maloney, West Hartford, Conn., $22,250, entire grading, with $1 per lin. ft. extra for telford, and $1 per lin. ft. for rubble drain; Edward P. Tracy, Derby, Conn., $26,050, 65 cts., 74 cts.; B. N. Beard Co., Shelton, Conn., $30,000, 65 cts., 75 cts.; Roger Kennedy, Middletown, Conn., $17,800, $1, $1.35; F. Arrigonio & Bro., Durham, Conn., $16,500, 75 cts., $1; Joseph Mascetti, Torrington, Conn., $19,200, 75 cts., $1; Sternberg & Cadwell, West Hartford, Conn., $17,391, 75 cts., $1.25.

Town of Ridgefield, First Section, 11,997 lin. ft. gravel-telford road, including four 12-in., three 15-in., one 18-in. and two 24-in. tile culverts, and one reinforced concrete culvert: B. D. Pierce, Jr., Co., Bridgeport, $2.16 for gravel, $3.12 for telford, 65 cts. for rubble drain; O. T. Benedict, Pittsfield, Mass., $1.83, $2.53, $1; B. N. Beard Co., Shelton, Conn., $2.50, $3.07, 75 cts.; Sternberg & Cadwell, West Hartford, $2.31, $3.05, $1.25; Jenks & Goepple, Wilton, Conn., $2.23, $2.68, $1; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $2.40, $3, $1. Second section, 3,837 lin. ft. gravel-telford, including two 12-in. and three 15-in. tile culverts: B. D. Pierce, Jr., Co., Bridgeport, $1.58 for gravel, $2.18 for telford, 75 cts. for rubble drain, $4.75 per cu. yd. for masonry; O. T. Benedict, Pittsfield, Mass., $1.59, $2.19, $2.50, $3.07 and 65 cts.; Jenks & Goepple, $1 and $6; B. N. Beard Co., Shelton, Conn., Wilton, Conn., $1.23, $1.88, $1, $4; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $1.76, $2.46, $1, $6.

Boro. of Naugatuck, First section, 3,300 lin. ft. macadam-telford road, including two 12-in., one 24-in., one 18-in., and one 20-in. tile culverts, (a) macadam, lin. ft.; (b) macadam, sq. yd.; (c) telford, lin. ft.; (d) telford, sq. yd.; (e) rubble drain; (f) cobble gutters; (g) masonry walls: O. T. Benedict, Pittsfield, Mass., (b) $1.13, (d) $1.50, (e) $1, (f) 60 cts., (g) $6; Edward Mc-

Manus, Waterbury, Conn., (a) $1.67½, (b) $1.07½, (c) $2.55½, (d) $1.02, (e) $1, (f) 60 cts., (g) $6; F. Arrigoni & Bro., Durham, Conn., (a) $2.19, (b) 95 cts., (c) $2.69, (d) $1.30, (e) 75 cts., (f) 65 cts., (g) $6; Lane Construction Corporation, Meriden, Conn., (a) $1.62, (b) 85 cts., (c) $2.32, (d) $1.20, (e) $1, (f) 60 cts., (g) $6. Second section, 6,698 lin. ft. gravel-telford: O. T. Benedict, Pittsfield, Mass., $1.59 for gravel, $2.19 for telford, $1 for rubble drain, 75 cts. for cobble gutters, $6 for masonry walls; Edward McManus, Waterbury, $1.31 (no price on telford, $1, 60 cts., 60 cts.; F. Arrigoni & Bro., Durham, $1.49, $1.99, 75 cts., 65 cts., $6; Lane Construction Corporation, Meriden, $1.15, $1.65, $1, 60 cts., $6. Town of New Fairfield. No bids received.

NEW YORK, N. Y.—Bids will be received until 11 a. m., Nov. 22, by Cyrus C. Miller, Pres. Boro. of Bronx, for regulating and paving with asphalt; also for setting curbstones, etc., on various streets in the Boro. of the Bronx.

The following bids were received on Nov. 7, by George McAneny, Pres. Boro., of Manhattan, for regulating, grading, curbing, flagging and laying a 42-in. double-pipe culvert in Muscoota St. (225th St.), from Broadway to the line dividing the Boros. of Manhattan and the Bronx: E. G. Haggerty, $59,849; P. H. Duffy, $74,411; McDonald & Barry, $67,985; Frederick Starr, $60,314; Giavanni & Viasco, $76,942; Stalworth Construction Co., $58,887.

Also for regulating and paving with wood block pavement on a concrete foundation the roadway of New St. (Delancey St.), from Bowery to Lafayette St.: Barber Asphalt Paving C., 30 Church St., $15,990; Republic Construction Co., $15,562; U. S. Wood Preserving Co., $14,222.

BUFFALO, N. Y.—The City Council has ordered the paving of the following streets: Timon St., 25 ft. wide, between Dodge and Northampton Sts.; Lansing Pl., 26 ft. wide, between Military Road and Joslyn Pl.; Willow Pl., 20 ft. wide, from Kinsley St. north to end of street; and the repaving of Oak St., 28 ft. wide, between Goodall and Carlton St., and directed Francis G. Ward, Comr. of Public Works, to prepare plans and specifications and advertise for bids for the paving of these streets with each kind of pavement, for the laying of which specifications have been filed by the Department of Public Works.

NEWARK, N. J.—The contracts for grading, curbing and flagging Hillside Ave., New York Ave., and Parkhurst St. have been awarded to ALEX. J. MILMOE by the Bd. of Street and Water Commissioners of Newark, M. R. Sherrerd, Ch. Engr.

Contract for paving Hedden Pl., from Orange City line, with granite block pavement on concrete, has been awarded to VAN KEUREN & SON, at $5,578.

Contract for paving 13th Ave., from South Tenth St. to South Twelfth St., with asphalt pavement, has been awarded to the STANDARD BITULITHIC CO., at $4,987.

Bids will be received for grading, curbing and flagging Clifton Ave until 3 p. m., Nov. [illegible], by the Board of Street and Water Commissioners of Newark. M. R. Sherrerd is Ch. Engr.

Bids will be received for the flagging of Frelinghuysen Ave., from Bigelow St. to Dayton St., until 3.15, Nov. 17, by the Board of Street and Water Commissioners at 3.15 p. m. About 45,000 sq. ft. of new 5-ft. flag, 1,000 sq. ft. of old flag relaid, and 500 sq. ft. of artificial sidewalks are the quantities advertised for.

•WESTFIELD, N. J.—We are officially advised that the following contracts were awarded Nov. 12 by the Town Council for street improvements, bids for which were received on Nov. 7: Contract No. 1, WELDON CONTRACTING CO., Rahway, N. J.; Contract No. 2, DANIEL DONOVAN, 140 West 25th St., Bayonne, N. J.; Contract No. 3, MONROE PAVING CO., 509 Betz Bldg., Philadelphia, Pa. Lloyd Thompson is City Clk.

ALLENTOWN, PA.—The contract for constructing sidewalk approaches for the bridge over the Lehigh River, between Slatington and Walnutport, bids for which were received on Nov. 4, by the Board of County Commissioners, has been awarded to THOMAS W. HAINES, of Wilkes-Barre.

KITTANNING, PA.—The contract for constructing 2½ miles of state road in Armstrong County has been awarded to JOHN SCHAFFNER, of Butler. The contract calls for a 12-ft. roadway of brick, with cement curbing 1 ft. square.

CONNELLSVILLE, PA.—The contract for improving Apple St., as follows, has been awarded to O'CONNER & MADIGAN, of Connellsville: 273 sq. yds. of wire cut brick at $1.10; 501.5 sq. yds. of Hillside brick at $1.20; grading, 60 cts.; curbing, 50 cts.; backing stone, 50 cts. J. B. Hogg is Boro. Engr.

ERIE PA.—The contract for laying asphalt pavement on German St., has been awarded to the CEMENT PRODUCTS CO., at $1.20 a sq. yd. Other bidders were: Doyle Bros., $1.34, and Mayer Bros. Co., $1.42.

HARRISBURG, PA.—The following contracts for paving 67 sections of the city streets were awarded on Oct. 31. Of these, 58 streets, totaling 107,518 sq. yds. of paving and 100,587 lin. ft. of curbing, were the second lot advertised for. The BARBER ASPHALT PAVING CO., Land Title Bldg., Philadelphia, received the contract for 47, and the CENTRAL CONSTRUCTION & SUPPLY CO., of Harrisburg, was given the contract for 10, for granite curbing as follows: Boyd, Second to Wallace, $6,412; Boyd, Wallace to Seventh, $1,111; Currant, Herr St. to Basin, $4,014; Fifth, Reily to Maclay, $8,474; Harris, Fourth to Seventh, $6,674; Sayford, Sixth to Seventh, $1,894; Wallace, Verbeke to Reily, $4,400; Chestnut, 13th to Summit, $2,912; 15th, State to Verbeke, $18,087. The other street was State, from Canal to Tenth and STUCKER BROS. CONSTRUCTION CO. got the contract to pave it with Shawmutt brick at $4,908. Of the 67 streets of the second bidding, the CENTRAL CO. secured the following, the price of the curb being 74 cts. per ft. for each: Cowden, Verbeke to Hamilton, $1.50; Emerald, Fifth to Jefferson, $1.44; Granite, Sixth to Seventh, $1.50; Jefferson, Maclay to Seneca, $1.44; Kelker, Front to Seventh, $1.45; Logan, Peffer to Geiger, $1.49; Muench, Front to Seventh, $1.42; Mifflin, Reily to Maclay, $1.51; Wood, Hamilton to Maclay, $1.47; Woodbine, Front to Seventh, $1.42; Bailey, Twelfth to 13th, $1.50.

The BARBER CO., with curb also at 74 cts., got paving as follows: Bell Alley, Rhoads to Fulton, $1.53; Clinton, Front to Seventh, $1.49; Dauphin, Second to Sixth, $1.49; Delaware, Front to Seventh, $1.48; Front, Kelker to Maclay, $1.46; Fulton, Reily to Maclay, $1.49; Granite, Second to Fifth, $1.47; Kelker Alley, Fulton to Fifth, $1.48; Logan, Reily to Delaware, $1.46; Logan, Delaware to Peffer, $1.46; Logan, Geiger to Maclay, $1.46; Minnie alley, Moltke to Wallace, $1.54; Myers alley, Delaware to Maclay, $1.55; Walter alley, Delaware to Maclay, $1.53; Penn, Reily to Maclay, $1.46; Reily, Sixth to Seventh, $1.50; Rhoads alley, Delaware to Peffer, $1.49; Rhoads alley, Geiger to Maclay, $1.51; Turner alley, Peffer to Maclay, $1,51; Ten-foot alley, between Fourth and Fulton, Delaware to 125 feet south, $1.50; Ten-foot alley, between Verbeke and Cumberland, Wallace to Currant, $1.48; Ten-foot alley, between Fulton and Fifth, Boyd to ten-foot alley, $1.49; Ten-foot alley between Fulton and Fifth, Dauphin to Muench, $1.49; Violet alley, Wood to Turner, $1.50; Wallace, Reily to Hamilton, $1.49; Wallace, Hamilton to Maclay, $1.49; Yousling alley, Peffer to Maclay, $1.53; Crabapple, Fifteenth to Sixteenth, $1.51; Crabapple, Sixteenth to south side ten-foot alley 100 ft. north of Market, $1.51; Christian, Sylvan Terrace to Mulberry, $1.52; 14th, Walnut to Market, $1.48; 14th, Market to Zarker, $1.51; 15th, Derry to Mayflower, $1.49; Howard, 13th to 14th, $1.48; Haehulen, Crescent to 13th, $1.54; Mary, Front to River, $1.49; North, 13th to 15th, $1.48; North, 17th to 18th, $1.48; Regina, 180 ft. east of 18th to Whitehall, $1.48; Reservoir, Regina to Whitehall, $1.52; 16th, Walnut to State, $1.49; 12th, Bailey to Walnut, $1.49; Ten-foot alley, 100 ft. north of Market, 15th to 16th, $1.48; Ten-foot alley, 100 ft. west of 15th, Crabapple to south end of same, $1.51; Zarker, 15th to 16th, $1.51; River, Vine to Paxton, $1.47.

MEADVILLE, PA.—See item under Manufacturing Plants.

MT. CARBON (Pottsville post-office) PA.—The contract for paving Center St. in Mt. Carbon, from the Pottsville boro line to the bridge spanning the Schuylkill river just beyond the arch, has been awarded to the JUNIATA PAVING CO., Empire Bldg., Philadelphia, at $6,660.

ROANOKE, VA.—Bids will be received by W. L. Craft, City Clk., until noon, Nov. 25, for the construction of granolithic sidewalks on various streets; also for macadamizing Main St., between Maryland Ave. and the corporate limits. F. L. Gibboney, is City Engr.

DALTON, GA.—Bids will be received until Nov. 22, by City Council of Dalton, for the construction of pavement on Hamilton, Crawford and King Sts. Also for furnishing the necessary labor and material for the construction of the following street improvement, including approximately 28,000 sq. yds. of street paving with all necessary drainage and granite curb as specified. W. M. Carroll is City Clk., and the H. S. Jaudon Engineering Co,. of Savannah, and Atlanta, is the Engr.

BIRMINGHAM, ALA.—The City Council has awarded the contract for street paving to DUNN & LALLANDE BROS., at $13,673, and to the E. W. JORDAN CONTRACTING CO., at $3,349, both of Birmingham.

MONTGOMERY, ALA.—Bids will be received until Nov. 21, by Allen R. Gilchrist, City Engr., for paving Clitheral St., between Hull and Decatur Sts.

•JACKSON, MISS.—The contract for 25,000 sq. yds. of paving on State St., bids for which were received on Oct. 4, has been awarded to the SOUTHERN BITULITHIC CO. The following prices were the lowest quoted: Asphalt, $1.75 a sq. yd.; bitulithic, $2.15 a sq. yd, and creosoted wood block, $2.14 a sq. yd. Bitulithic will be used.

CROWLEY, LA.—The City Council has awarded the contract to DE JERSEY & BARNARD, of Jennings, La., to construct 33,000 sq. ft. of concrete street crossings at 28 cts. per sq. ft. for crossings and 14 cts. per sq. ft. for approaches from side streets to crossings. R. J. Boudreaux, is City Clk.

CALDWELL, OHIO.—Bids were received on Nov. 9, by the Board of County Commissioners, for improving, by grading, paving, etc., the Caldwell and Belle Valley road. The contract was awarded to JUNIPER & NIXON, at $14,995. The work will be done under the supervision of the State Highway Department.

CHARDON, OHIO.—Bids were received on November 9, at the office of the County Commissioners, for the improvement of the Hambden Center Road, as follows: Ohio Engineering Co., Elyria, $11,216; Chinnock Bros., Warren, $11,656; Gould & Maybach, Collinwood, Ohio, $11,700; Buckeye Engineering Co., Norwalk, $11,290; CEMENT PRODUCTS CO, Erie, Pa., $11,067 (contract awarded). The work will be done under the supervision of the Ohio highway Commissioner.

CINCINNATI, OHIO.—Bids will be received by the Board of County Commissioners, until noon, Dec. 2, for improving North Bend road, under specifications No. 110. Fred Dreihs is Clk. of Bd.

CLEVELAND, OHIO.—Bids are asked by the Board of County Commissioners of Cuyahoga County, until 11 a. m., Nov. 26, for grading Granger Road in South Newburg Township, at station 45. John F. Goldenbogen is Clk.

LINDEN HEIGHTS, OHIO.—F. O. Howell, Village Clk., will receive bids until noon, Dec. 5, for furnishing the necessary labor and materials for the construction of approximately 190,000 sq. ft. flagstone sidewalks and also the construction of gutters sufficient to drain the walks, in the village of Linden Heights.

EATON, OHIO.—The following bids were received on Nov. 1, by the Board of County Commissioners, for grading and macadamizing a road two miles long in Washington Township. JENKINS & HINES, of Frankfort, Ind., at $10,500 (awarded contract); J. E. Mings, of Eaton, $10,625; Francis Wilson, of Xenia, $10,723; Fishbaugh, Appenzeller & Karch, of Celina, $10,865; The A. Wertz Transfer Co. & J. H. Trunck, of Hamilton, $10,850. Work will not begin before spring. The estimated cost was $11,668.

NEW CASTLE, IND.—The following bids have been received by the City Council for paving I Ave., from 18th St. to 21st St.: GREENWOOD, CONNER, BOOTS & GANT, of Connersville, $6,646 (awarded contract); D. C. Mitchell, $7,637; John Gubbins, $6,665; Frost McClaren, $7,026; Charles Minnick, $7,482.

RENSSELAER, IND.—The bids received on Nov. 9, by James N. Leatherman, County Audr., for the construction of five stone roads, have been rejected. New bids are asked until Dec. 6, we are officially advised.

DANVILLE, IND.—The Commissioners of Hendricks County have awarded a contract for the construction of two gravel roads, one to McMAHON & CO. of Fortville, and the other to SHANNON & McCARTHY, of Lebanon.

WILLIAMSPORT, IND.—The Commissioners of Warren County will receive bids until 1 p. m., Dec. 5, for the construction of a gravel road in Jordan Township. R. L. Winks is County Aud.

HUNTINGTON, IND.—The Commissioners of Huntington County will soon ask for bids for the construction of the Belden gravel road, on the line between Dallas and Bagro Townships, petitioned for by William Bitzer and others.

RUSHVILLE, IND.—The Commissioners of Rush County let contracts for the construction of the following gravel roads at a cost of approximately $40,000 on Nov. 10: The Beisure road, between Posey and Ripley Townships was let to J. F. PRICE, at $9,700; the Offit road in Posey Township to WILK & CO., at $11,992; also the Walker road in Ripley Township, at $7,908; and the George road in Noble Township to AMOS W. STEVENS at $19,420.

GREENCASTLE, IND.—Bids will be received by the Commissioners of Putnam County until 10 a. m., Dec. 5, for the construction of 13,956.8 ft. of gravel road in Jackson and Franklin Townships, known as the Omer C. Sanders road.

TERRE HAUTE, IND.—The Commissioners of Vigo County will receive bids until 11 a. m., Nov. 30, for the construction of the Koonce gravel road, in Fayette Township, said road to be 2,855 ft. in length. N. G. Wallace, is County Aud.

LIBERTY, IND.—Bids will be received by the Commissioners of Union County, until Dec. 5, for the construction of the Morris gravel road, in Center Township, said road about 15,840 ft. long. Clinton Gardner is County Audr.

JEFFERSONVILLE, IND.—The commissioners of Clark County are asking for bids until 10 a. m., Dec. 5, for the construction, by grading and paving, with gravel and crushed stone, a highway in Bethlehem and New Washington Townships. Peter Nachand is County Audr.

FOWLER, IND.—The Commissioners of Benton County have awarded contracts for the construction of gravel roads as follows: The Yates road, to EVANS & HAWKINS, at $6,920; the Ewan road, to J. H. CROUCH, at $8,599; and the Welti road to MAHONEY & ALLEN, at $9,772.

GALESBURG, ILL.—The contract for paving South Seminary St., bids for which were received on Nov. 3, by the Board of Local Improvements, was awarded to JOHN B. McAULEY, of Galesburg, at $26,859. Two other bids were submitted: I. D. Lain, of Bloomington, $28,128, and P. H. Tiernan, of Macomb, $30,547.

JANESVILLE, WIS.—G. D. CANNON, has been awarded the contract for constructing cement curb and gutters on twelve streets in the city, at 48 cts. a foot.

DAVENPORT, IOWA.—The Board of Local Improvements plans to widen Fifth Ave., from 15th to 18th St.

WINFIELD, KAN.—It is reported an extensive boulevard and park system is planned here by Christian Jensen, Ass't Forester.

LINCOLN, NEB.—Bids will be received by Roscoe C. Ozman, City Clk., until noon, Nov. 18, for paving and curbing the roadway in Paving District No. 113, being B St. from Eighth to Eleventh Sts.; and Paving District No. 183, being C St. from 19th to 27th Sts., B St., from 19th to 20th Sts., and 19th Street from A to D Sts.

SPRINGFIELD, MO.—The following bids were the lowest received by the Street and Alley Committee of the City Council on Nov. 5: The Jarrett Construction Co.—For constructing asphaltic concrete pavement on Weller Ave., from Cherry to Catalpa Sts., $1.52 per sq. yd.; for concrete curbing on North Grant St., from Atlantic to High Sts., at 36 cts. per lin, ft.; for construction of first-class 5-foot cement sidewalk on west side of Weller Ave., from Cherry to Catalpa St., at 55 cts, per lin. ft. for walk and 25 cts. uper cu. yd. for grading; for construction of first class 5-foot cement sidewalk on west side of Pickwick St., from Cherry to Catalpa Sts., at 55 cts. per lin, ft. for walk and 25 cts, per cu, yd. for grading; for construction of first class 5-foot cement sidewalk on National Boulevard from Cherry St. to southern city limits, at 54 cts. per lin. ft., for walk, and 25 cts. per cu. yd. for grading.

J. C. Likes—For the construction of first class brick paving on East Elm St., from the National Boulevard to Frisco right-of-way, at $2.24 per sq. yd.

J. Stahl—For the construction of first class 5-foot cement sidewalk on the east side of Weller Ave., from the Frisco right-of-way to Catalpa St., at 60 cts. per lin. ft. for the walk, and 23 cts. per cu. yd. for grading; for first class 5-foot cement sidewalk on east side of Pickwick Ave., from Cherry to Catalpa Sts., at 60 cts. per lin. ft. for the walk, and 28 cts. per cu. yd. for the grading.

Charles Bigbee—For first class 4-ft. cement sidewalk on north side of Lombard Ave., from King's Highway to Holland St., 44 cts. per lin. ft. for the walk, and 20 cts. per. cu. yd. for the grading; also for first class 4-foot cement sidewalk on south side of Lombard Ave., from King's highway to Holland St., at 44 cts. per lin. ft. for the walk and 20 cts. per cu. yd. for the grading; also for 4-foot first class cement sidewalk on north side of Page Ave., from King's Highway to Holland St., same price as foregoing; also for 4-foot first class cement sidewalk on both sides of Pearl St., from Madison to Elm Sts., at 40 cts. per lin. ft. for the walk and 25 cts. per cu. yd. for the grading.

ADDINGTON, OKLA.—Bids will be received by J. W. McKenney, Town Clk., until 2 p. m., Nov. 21, for the construction of approximately 2,560 sq. ft. of concrete crossings, and approximately 7,200 sq. ft. of concrete sidewalk.

TULSA, OKLA.—The City Council will receive bids until Nov. 22, for about seven miles of paving in Tulsa. Estimated cost, $300,000.

TACOMA, WASH.—The contract to pave Cliff Ave., from North Fourth St., has been awarded by Owen Woods, Comr. of Public Works, to the BARBER ASPHALT PAVING CO., 18th and Dock Sts., Tacoma, at $29,394.

PUYALLUP, WASH.—The City Council has accepted the bid of the WARREN CONSTRUCTION CO., 59 Temple Pl., Boston, Mass., for paving in local improvement District No. 23, of Rainier St., between the Northern Pacific right-of-way and Union Ave., with bitulithic. Their bid was $11,094.

PORTLAND, ORE.—The Street Committee of the City Executive Board awarded the contract to the WARREN CONSTRUCTION CO., of Boston, for paving East Madison St., from East 16th to East 24th, with bitulithic pavement, at $19,622.

LONG BEACH, CAL.—The following bids have been received for improving American East and American Ave. West: Oil Macadam Paving Co., macadamizing per sq. ft., 12¾ cts.; curbing, per lin. ft., 31½ cts.; gutters, per sq. ft., 22 cts.; culverts, and manholes, complete, $217.50 each; White & Gaskill, grading and paving, per sq, ft., 12.3 cts., curbing, per lin. ft., 33 cts., gutters, per sq. ft., 22½ cts., and all culverts, complete, $1,059.

LOS ANGELES, CAL.—The Board of Public Works has awarded the contract to GEORGE H. OSWALD, for improving Lorena St., at $7,268. Also for improving Naomi Ave. to WITHERS & CRITES, at $3,195.

The contract for laying cement sidewalks on Eighth St., from Figueroa to Francisco Sts., has been awarded to FRANK ROLFE, 1631 Council St., Los Angeles, at 9 cts. a sq. ft., by the Board of Public Works.

SAN DIEGO, CAL.—The FAIRCHILD GILMORE WILTON CO. was awarded a contract for paving D St., from 15th to 25th Sts., at $26,131.

The City Council has ordered the following street work to be done: The construction of cement sidewalks and curbs on Georgia St.; asphalt paving on F St., together with cement curbs, granite block gutters, cement drains and catch basins; also to perform the same work on G St., and to pave and curb Elm St. Plans on file in the office of E. M. Capps, City Engr.

BISBEE, ARIZ.—C. W. Hicks, City Clk., has been authorized to advertise for bids for macadamizing the speedway, East Congress St., for constructing cement curbs on Third St. and for laying cement sidewalks on West Congress and Scott Sts.

SALT LAKE CITY, UTAH.—ALLEN & AUSTIN have received the contract for the construction of about 2,000 sq. ft. of cement paving, around the grounds of the Waterloo school, in Salt Lake City, at 17 cts a sq. ft.

MANUFACTURING PLANTS.

AUGUSTA, ME.—The Cushnoc Paper Co., Maple St., plans to erect a paper mill, four stories high, 60 × 74 ft., of reinforced-concrete construction, to cost $40,000. In addition, four head gates and six turbines are contemplated, and a new canal from Kennebec dam.

BRATTLEBORO, VT.—The work of constructing the proposed Fort Dummer cotton mills will start soon. Edward G. Cace, of Providence, R. I., will be Pres. and Mgr. About 300 people will be employed.

SPRINGFIELD, MASS.—In addition to the new concrete building being erected by the H. B. Smith Co. to contain concrete core ovens, the company is planning to erect an additional foundry building 200 ft. long in Main St. north of the new core building. On the south end of the property, the company is to erect a 3-story machine shop. It was planned to erect these buildings this fall, but it is now planned to let the work go over until next spring. The capacity of the plant will be greatly enlarged.

CANTON, MASS.—We are officially advised that the contract to erect a blanket mill for Draper Bros. has been awarded to the J. W. BISHOP CO., of Worcester. It will be two stories high, mill construction, of brick and wood and 60 × 100 ft. Cost, $13,000. F. W. Dean, 53 State St., Boston, is Engr. Noted under "Clinton, Mass.," last week.

ARLINGTON (Providence post-office), R. I.—The contract to erect a factory here for the Providence Box & Lumber Co., of Providence, has been awarded to T. F. CULLINAN & CO., of Providence. The main building will be 80 × 200 ft., with a power plant attached, 32 × 67 ft.; also a wing 40 ×

40 ft. The structure will be of mill construction. The engine has been purchased from the Corliss Engine Co., of Providence.

DANBURY, CONN.—The American Hatters & Furriers Corporation, of which Charles D. Parker is Mgr., whose factory was destroyed by fire recently, entailing a loss of from $100,000 to $150,000, will probably rebuild the plant, and it is expected that work will be started as soon as the insurance is adjusted. The power plant was also practically ruined.

PLANTSVILLE, CONN.—The plant of H. B. Smith & Co., manufacturers of carriage hardware, which was almost entirely destroyed by fire recently, will be rebuilt. The cost is estimated at $200,000.

NEW YORK, N. Y.—Plans are being prepared by Gronenberg & Leuchtag, Archs., 7 West 22d St., for a 6-story brick and stone light manufacturing building at 767 Greenwich St. It will have a slag roof and will be 21 × 67.9 ft. Max Levinzton, 484 East 141st St., is the owner. Cost, $25,000.

The Julius Realty Co., 200 Broadway, will soon award sub-contracts for the 4-story light manufacturing building, 53.8 × 41.8 ft., to be erected at Eldridge, Division and Forsyth Sts. Sommerfeld & Steckler, 19 Union Sq., have prepared the plans. William Bachrach is Pres. and Julius Bachrach, Treas. Cost, $10,000.

Shapiro & Aronson, gas and electric fixture manufacturers, 24 Morton St., Brooklyn, will soon begin the erection of a fireproof factory building, five stories, of reinforced concrete, 100 × 100 ft. at the northeast corner of Snedicker and Glenmore Aves. F. A. Waldron, 37 Wall St., New York, the Arch. and Engr., is ready to take estimates on the general contract and carpenter work.

STAPLETON (S. I.), N. Y.—The TURNER CONSTRUCTION CO., 11 Broadway, New York, has been awarded the contract to erect the bakery building for the Thomas & Williams Co., at Stapleton. It will be two stories, 66 × 100 ft., of reinforced concrete construction, we are officially advised.

LONG ISLAND CITY (L. I.), N. Y.—The Lozier Motor Co., Broadway and 56th St., New York, has purchased a plot, 150 × 200 ft., on Thompson Ave., Long Island City, for the purpose of erecting a 6-story fireproof plant of concrete construction.

CLAYVILLE, N. Y.—The Clayville Knitting Co. plans to double the capacity of its plant here, it is reported.

ROCHESTER, N. Y.—The Stecher Lithographic Co., Frank A. Stecher, Pres., 274 Goodman St., Rochester, will erect a three-story brick addition to the lithographic plant, to cost about $50,000.

SYRACUSE, N. Y.—Edward A. Howard, Arch., Bastable Bldg., Syracuse, is completing plans for a 5-story brick mill construction, industrial building, 34 × 134 ft., for the Onondaga Bed Mfg. Co., 714 East Water St., Syracuse, to be erected here.

ROCHESTER, N. Y.—The Rochester Fiber Box Co. will build a factory, from plans of James R. Tyler, Arch., Insurance Bldg. Estimated cost, $50,000. John A. Lewis, 129 Andrew St., is Pres.

ASBURY PARK, N. J.—Millar, Mandel & Co., 57 West 17th St., New York, dealers in cloaks and suits, are having plans prepared by C. W. Smith, Arch., Appleby Bldg., Asbury Park, for a factory building, of brick and steel, two stories high, 99 × 113 ft., to be erected at First Ave. and Langford St. The architect is now ready to receive estimates on the general contract.

WEST NEW YORK (Weehawken post-office), N. J.—The American Cotton Oil Co. has purchased a plot of land, 129 × 60 ft., on the south side of Ferry Road, between River Road and Farragut Pl., West New York. The property will be used for the erection of an addition to its plant.

JERSEY CITY, N. J.—The Brady Brass Co. will erect a factory on the north side of 14th St., between Grove and Henderson Sts., as soon as necessary plans are completed.

CONSTABLE HOOK (Bayonne post-office), N. J.—The Standard Oil Co., 26 Broadway, New York, is receiving bids for the erection of a 2-story reinforced concrete oil can factory, 150 × 300 ft., to cost $75,000. The owners are taking bids at the Bayonne office.

PATERSON, N. J.—The Levy mill, which was partially destroyed by fire last spring, will be rebuilt. It is located at River and Bridge Sts. Charles E. Slate is Arch. The Pioneer Realty Co., 250 Main St., filed the plans.

HUNTINGDON, PA.—The Rex Aerial Navigation & Construction Co., of which C. F. Rex is Pres., has closed a deal with R. W. Jacobs, for 20 acres of land, on which will be built a plant to manufacture aeroplanes.

CLAREMONT (Hoboken post-office), PA.—The R. D. Nuttall Co., Garrison and Lafayette Sts., Pittsburg, a subsidiary plant of the Westinghouse Electric Co., of Pittsburg, plans to build a plant at Claremont, along the Allegheny River front. Estimated cost, $1,000,000.

ELIZABETHTOWN, PA.—The American Culm Furnace Co., of Philadelphia, manufacturers of steam and heating apparatus, will erect a plant here, it is stated.

PITTSBURG, PA.—The George H. Soffel Co., dealers in and manufacturers of plumbing supplies, 425 Second Ave., has purchased through George E. Meyers, St. Nicholas Bldg., a lot measuring 22 × 112 ft. on Forbes St., near Warson St., on which it is planned to build a 5-story factory, at a cost of about $75,000.

NICETOWN (Philadelphia post-office), PA.—The Midvale Steel Co., of Midvale and Nicetown, has awarded the contract for the construction of its proposed wheel plant here to W. W. LINDSAY & CO., Harrison Bldg., Philadelphia. The plant will be one story in height, of steel and corrugated iron, 82 × 170 ft. Work is to be started at once, and completed this winter. The contracts for the mechanical equipment, which will be required, have not been placed by the company's engineers. Cost, $17,000.

PHILADELPHIA, PA.—Bids are asked until Nov. 21, by Stuckert & Sloan, Archs., Crozier Bldg., this city, for a boiler and engine house and bottle washing department, for the Dolfinger Standard Dairies, Tasker and 16th Sts. Henry D. Dolfinger, 1528 16th St., is Pres. The building will be a 3-story reinforced-concrete structure, and will be built this winter.

SIEGFRIED, PA.—The contract for the power-house and silk mill for the Jacob H. Meyer Silk Mfg. Co., of this place, has been awarded to E. T. ZELLNER, of Coplay, Pa. The plant will be of concrete block exterior, mill construction, one story and basement, and will consist of two buildings; a power plant 29 × 36 ft. and a mill, 110 × 114 ft. Jacoby & Weishample, Commonwealth Bldg., Allentown, Pa., are the Archs. The contract for power and mill equipment has not yet been awarded.

LANCASTER, PA.—Plans have been prepared by Charles Balderson, Arch., 411 Walnut St., for a 2-story brick bakery, 80 × 200 ft. and 40 × 40 ft., for Christian Geinsenhauser of Lancaster. The owner will receive bids. Cost, $50,000.

MEADVILLE, PA.—Moore Bros. plan the erection of a brick building in the North Water St. section for their Crawford Dairy Co. plant. The structure will be one story high, 51 × 125 ft., with a floor space of 12,750 ft., including the basement. A 25-ft. driveway will be constructed of cement, at the rear of the building, which will be used for the delivery department of the company. E. C. Moore is one of the officers.

McKEESPORT, PA.—Morris Nelson & Co., meat packers, plan to erect a new branch house here, which will double the capacity of the present quarters at Fourth Ave. and Sinclair St. The cost will be between $50,000 and $60,000.

MODENA, PA.—The contract to erect an addition to the paper mill of the Megargee Paper Mills, has been awarded to F. L. HOOVER & SONS, Builders Exchange, Philadelphia. It will be three stories high, 40 x 30 ft., and a boiler house, 35 × 40 ft., of brick.

PHILADELPHIA, PA.—Plans are being prepared for alterations and additions to the factory of Jacob Mainon, 210 Church St., at 42 No. Third St. Anderson & Haupt, Drexel Bldg., are the Archs. Cost, $10,000.

RED LION, PA.—The Lion Knitting Mills of Scranton, are to establish a plant at Red Lion, which will give employment to about 40 operators. The men interested in the enterprise are: George Stewart, John E. Boher, J. S. Heiges and Livingston Jones.

TRAFFORD, PA.—The Coin Machine Mfg. Co., of Portland, Ore., recently purchased 30 acres of land, known as the Lutzinger farm and plans to build a plant. The officers of the company are: T. Irving Potter, Pres. and Mgr.; T. B. Potter, Vice-Pres.; H. D. Ramsdell, Secy.; R. W. Scheer, Treas., with the offices of the company in Portland. The corporation is capitalized at $2,000,000.

WAYNESBORO, PA.—J. C. Roulette & Sons, Props., of the R. A. Knitting Mills, Hagerstown, Md., are making arrangements to erect a plant at Waynesboro, where they now operate a small branch. A site for the proposed plant has already been purchased. The building will be 185 × 200 ft.

BALTIMORE, MD.—Henry J. Tinley, Arch., 11 East Lexington St., is preparing plans for a warehouse and factory building, to be built at Central and Fairmount Aves., for Eugene Blake. According to the plans the building will be three stories high, of brick and stone, with concrete foundation. It will front 50 ft. by a depth of 90 ft. Electric lights and steam heat will be installed. Contractors will shortly be asked to estimate on the construction.

Dietrich Bros., iron and steel manufacturers, 346 North St., plan to build a shop on the site bounded by North, Pleasant, Davis and Bath Sts. The main structure will be of brick and stone, with concrete foundation, and five stories high. The second will be three stories high and the third, one story high. The second building will be of ornamental iron, stone and brick, while the third will be of corrugated iron. The main building will have a frontage of 31 ft. by a depth of 114 ft., while the second structure will measure 20 × 115 ft. Cost, $150,000.

•FORT MONROE, VA.—Bids will be received by Capt. Ernest R. Tilton, Constr. Q. M., U. S. A., until 10 a. m., Dec. 15, for the construction of an ordnance repair shop, including plumbing.

SOUTHMONT, N. C.—George Singleton of Dover, N. J., plans to build silk mills here, a new town now being located on the Winston-Salem Southbound Ry.

GREENVILLE, S. C.—A plan to establish a cotton mill here, is being promoted by J. I. Westervelt, of Greenville. It will be equipped with about 50,000 spindles and 1,200 looms. It will have a capital stock of $900,000, according to reports.

KNOXVILLE, TENN.—The Biddle Mfg. Co., of this city, and the Harriman Knitting Mills, of Harriman, will be consolidated, and a new manufacturing plant is to be established here. Application for a charter for the concern will be filed. The directors will be: F. A. Weiss, who is connected with the Holston Mfg. Co. at Lenoir City; D. A. Rosenthal, Charles M. Cooley, J. P. Gaut and P. J. Briscoe of this city. The capital stock will be $50,000.

ATHENS, OHIO.—Plans are being formulated toward the erection of an ice cream factory, to be owned and managed by J. Haliday Cline and A. H. Boggs.

CINCINNATI, OHIO.—Plans have been prepared by E. Fred Glaser, Arch., 1202 Vine St., for an addition to the bottling works of the Hudepohl Brewing Co., 40 East McMicken Ave. It will be 100 × 150 ft.

CINCINNATI, OHIO.—The Herancourt Brewing Co., recently applied for a permit to build an iron and concrete structure at 1406 Harrison Ave. The building will be used as a stockhouse and cold storage plant. The estimated cost, is $40,000.

CLEVELAND, OHIO.—The contract to erect a factory building on Hamilton Ave., near East 49th St., has been awarded to C. N. GRIFFIN & Co., 2164 Ashland Rd., S. E., for the Bishop & Babcock Co. It will be a 4-story brick and timber structure.

The Telephone Improvement Co., of New York, a corporation with a capital stock of $3,000,000, was fully organized in Cleveland, recently for the purpose of consolidating the Telechronometer Co., of Rochester, N. Y., and the North Electric Co., of this city, for the manufacture of electrical appliances.

The general contract to erect two factory buildings on Ivanhoe Rd., N. E., for the Cleveland Foundry Co., has been awarded to the D. C. GRIESE & WALKER CO., 1417 Prospect St., S. E., and the steel contract has been let to the FOREST CITY STEEL & IRON CO., West 110th St. George S. Rider & Co., Century Bldg., are the Consult. Engrs.

COLUMBUS, OHIO.—Marriott & Allen, Archs., Clinton Bank Bldg., have awarded the contract for the concrete work and the reinforced work on the Moore Oil Co.'s warehouse to be erected on Cleveland Ave., to H. L. HADDOX, of Newark. The remaining contracts will be awarded soon.

SPRINGFIELD, OHIO.—Plans will be prepared under the supervision of William Garstang, Supt. M. P., Indianapolis, Ind., for the construction of car shops in Springfield, for the Cleveland, Cincinnati, Chicago & St. Louis Ry. Co. ("The Big Four"). Construction work will start next spring. The buildings will cost $60,000 and the equipment about $40,000.

TOLEDO, OHIO.—George S. Mills, Ohio Bldg., will soon receive estimates on a 1-story addition, 100 × 120 ft., to the present manufacturing plant of A. Black & Co., cloak manufacturers, Superior and Jackson Sts. The cost of the addition will be $40,000.

WARREN, OHIO.—The General Foundry Co., of Bradford, Pa., plans the erection of a foundry here, on a site of 40 acres, which was given by the city, in the northeast part, between the Erie and Pennsylvania lines. The company is to employ 150 men for 300 days a year for five years, in return for the site. The company manufactures converted steel castings.

GOODLAND, IND.—The Goodland Grain Co., W. E. Rich, Pres., has been incorporated to build and equip a grain elevator in Goodland.

HUNTINGTON, IND.—Orton & Steinbrenner are asking for bids for the erection of a factory building here.

CENTERTON, IND.—The contract to build a grain elevator on the site of the one recently destroyed by fire, we are officially advised, has been awarded to the RELIANCE CONSTRUCTION CO., of Indianapolis. L. Rothrock & Son are the owners.

MONTICELLO, IND.—John Sandy, I. N. Cash and E. E. Sluss will erect and equip a factory for the manufacture of cement tile.

NEW ALBANY, IND.—The American Auto Mfg. Co., of Beatrice, Neb., has purchased the old plant known as the DuPauw Woolen Mills in New Albany and will remove its headquarters to that city at once. It is expected that work will be commenced soon. The plant covers an area of seven acres, two-thirds of which is under roof. Improvements to cost $350,000, will be made.

RICHMOND, IND.—The Chesapeake & Ohio R. R. Co., has announced that it will build a new round house in this city. H. Pierce, of Richmond, Va., is Engr. of Constr.

DETROIT, MICH.—The Co-operative Raw Fur Co., 214 Jefferson Ave., has purchased a building, 40 × 100 ft., four stories and basement, at 62-64 Jefferson Ave., and will remodel and equip it for manufacturing purposes. The company has been capitalized at $100,000.

The Day Automobile Co., has been incorporated, and capitalized at $200,000, to build and equip a factory for the manufacture of automobiles. Cameron F. Roberts, is Secy., 347 Woodward Ave.

The Buhl Malleable Co., Arthur H. Buhl, Pres., Wright and Adair Sts., is contemplating a brick and steel factory building, to be equipped as a steel foundry. About $100,000 will be spent on the plant including equipment.

William F. McDonald, Engr., Ford Bldg., has let the general contract to SCHMIED-SISMAN CO., 391 Beaufait Ave., for rebuilding the plant recently destroyed by fire at a loss of $130,000, for the Phoenix Wire Works, Kirby and Dequindre Sts.

H. W. Pipp, 206 Ashley St., Ann Arbor, Mich., has let the general contract for the 1-story and basement brick and reinforced concrete factory, 60 × 200 ft., to be located on Artillery Ave., Detroit, Mich., for the Michigan Pressed Steel Co., H. F. Stevens, Secy., Ypsilanti, Mich., to the A. R. COLE CO., of Ann Arbor, Mich.; steam heating to ROBERT ABBEY, of Detroit, Mich. The plant and equipment will cost approximately $60,000.

B. C. Wetzel & Co., Hammond Bldg., let the following contracts on Oct. 28, for the 4-story and basement addition, 53 × 75 ft., to the Detroit Show Case Co.'s present plant: Masonry, to OTTO MISCH, Home Bank Bldg.; carpentry to MALOW BROS., 1104 Mt. Elliott Ave. Herbert Malott, 490 West Fort St., is Secy.-Treas. Cost of plant and equipment $45,000.

Louis Kamper, Fine Arts Bldg., let the steam heating contract for the proposed auto factory, three stories and basement, 192 × 64 ft., with two wings 192 × 64 ft., two stories high for Scherer and Wadsworth, care of the Michigan Steel Boat Co., to the GENERAL FIRE EXTINGUISHER CO., Ford Bldg. The owners will build. Cost of plant, $100,000.

FLINT, MICH.—The Packers Architectural & Engineering Co., Wright Bldg., St. Louis, Mo., is preparing plans for a 4-story and basement packing plant, 46 × 105 ft., for W. C. Wolcott, of Flint. Cost, $75,000.

The Buick Motor Co., W. C. Durant, Gen.-Mgr., Flint, has let the general contract for the building and equipment, to W[illegible] WOOD, Ford Bldg., Detroit, Mich., for a [illegible] forge building, one story high, 500 × 5[illegible] and a 2-story brass foundry, 842 × 7[illegible] The buildings are to be of brick an[illegible]crete construction, with concrete floors. [illegible]st of which will be $175,000.

GRAND RAPIDS, MICH.—The Terrell Equipment Co., of Grand Rapids, [illegible]ving plans prepared for a 2-story factory [illegible]ion, 80 × 385 ft., to be erected, at a cost [illegible],-000.

LOCKPORT, ILL.—The Texas Co. [illegible]ntly filed a certificate of incorporation [illegible] Will County, preparatory, it is believed, [illegible] doing business in Illinois. The company, [illegible]h is said to be backed by John W. Gates [illegible] Col. John Lambert, is capitalized in T[illegible] for $36,000,000, and controls extensive [illegible]ands in the southwest. This company, [illegible] reported, has acquired 200 acres of la[illegible] for a plant along the drainage canal at Lockport.

MILWAUKEE, WIS.—A permit has been issued to the ANSON ELDRED CO. [illegible]r the construction of a 5-story manufacturing building, to be occupied by the Phoenix Knitting Co., at Broadway and Chicago Sts. The cost is approximately $85,000.

NEENAH, WIS.—The Hardwood Products Co. has accepted the plans as prepared by the Flour Bros. Construction Co. of Oshkosh, for its proposed plant. The buildings will be of brick and will have concrete foundations. The main factory building, will be three stories, high, 100 × 190 ft.; the power plant, two stories, 73 × 76 ft.; two dry kilns 15 × 41 ft.; a 2-story warehouse, 71 × 115 ft.; and an office building.

RACINE, WIS.—The Horlick Malted Milk Co. has completed arrangements for the construction of an auxiliary plant equal in size to either of the two plants now standing.

BRAINERD, MINN.—Preparations are being made by the Northwest Paper Co., to construct a paper mill here, it is stated. The company now operates a pulp mill and has a dam over which, however, most of the water runs to waste. This dam will be raised from five to six feet when the paper mill is built.

ST. PAUL, MINN.—The St. Paul Bread Co., Timothy Foley, Pres., proposes to construct a group of buildings from one to three stories in height, on the block which it has purchased, at Robert and Eleventh Sts., to establish a bakery plant, to cost $150,000.

OMAHA, NEB.—The Imperial Milling Co., of David City, Neb., plans to construct a grain elevator on 33d St., Omaha, at an estimated cost of $50,000. The Commercial Club is interested.

TEXAS CITY, TEX.—W. L. Dearborn, 82 Beaver St., New York, is visiting Texas City to make arrangements for the installation of a sugar refinery, to cost about $900,000. Mr. Dearborn may be addressed at the Brazes, Texas City.

HOUSTON, TEX.—Andrea Rey & Co., of Tampa, Fla., manufacturers of cigars, plan the construction of a factory in Houston. Temporarily, the factory will be located at 2718 McKinney Ave.

ANAHEIM, CAL.—CHARLES SCHINDLER & SON have been awarded the contract for the construction of the first building for the Anaheim Sugar Co., their bid being the lowest of twelve submitted, $60,000. There will be two main buildings, one a factory, 60 × 400 ft., three and four stories high. The other will be a 1-story structure, 40 × 275 ft., to contain the boiler house, machine shop, lime kiln and pulp warehouse. They will have concrete foundations, and brick walls, with composition roof. The structural steel will be furnished by the AMERICAN BRIDGE CO. The construction work will be done under the supervision of Walter Trindel. The plans were drawn by Otto Egge, Engr. The capacity of the plant will be 600 tons daily. Plans are in preparation to double the capacity of the plant at the end of the year.

HUNTINGTON BEACH, CAL.—CARL LEONARDT, H. W. Hellman Bldg., Los Angeles, has been awarded contract for constructing the foundations for the factory of the Holly Sugar Co., to be erected here.

LOS ANGELES, CAL.—The California Unit Brick & Tile Co., has been incorporated here to control the Sawyer patents, for the manufacture of cement roofing tile and unit brick in California. The capital stock is $250,000, of which $131,000 is subscribed. The incorporators are: F. R., A. A. and H. C. Yerxa, of Sierra Madre; C. C. Davis, of South Pasadena, and J. Jones, of Los Angeles.

SACRAMENTO, CAL.—Negotiations which have been under way for some time between the "A" Auto Mfg. Co. and the North Sacramento Land Co., were closed for the site for the proposed automobile factory to be erected on the Haggin Grant. Architects are now working on the plans for the factory buildings. The factory will include a foundry, machine shops, erecting shops, paint shop, woodworking shop and finishing shop, which will when complete, cost several hundred thousand dollars, but it is planned to spend on the machinery and buildings about $150,000 in the first year. Offices have been opened in the Land Bldg., on Tenth St., between K and L, and these will be used by the officers until the factory is under way. The officers are: E. C. Collins, Pres.; J. H. Graham, Vice.-Pres.; Charles E. Gibbs, Secy.; and T. F. Cooke, Treas.

KLAMATH FALLS, ORE.—The Southern Pacific Co. plans to erect a 20-stall roundhouse and repair plant here. G. W. Boschke, of Portland, is Ch. Engr.

SALEM, ORE.—We are officially advised that bids will be received about Dec. 15, for the construction of a furniture factory, two stories high. There will be three buildings, 60 × 100 ft., 50 × 70 ft., and 40 × 60 ft. The Perfection Sewing Machine Cabinet Co., Inc., Charles Yates, Secy., is the owner. Estimated cost, $47,000. Noted on Oct. 20.

GOLDFIELD, NEV.—The Nevada Salt & Borax Co., of Fallon, Nev., has been organized with $1,000,000 capital stock to develop the salt marshes in Carson Sink and to build a railroad from Fallon to the Sink, a distance of 30 miles. C. W. Kinney of Fallon, C. O. Draper of Jansen, Draper & Co. of New York, A. C. Dodge of New York and R. W. Wiley, an Alaska mining man, are the interested parties.

WELLSVILLE, UTAH.—The Cache Valley Condensed Milk Co., of Salt Lake City, at a recent meeting of the directors, decided to erect a branch factory here, to cost $40,000.

RIGBY, IDAHO.—A company headed by A. A. [illegible]n has been formed here for the purpose of establishing a creamery. A site has been chosen, and as soon as arrangements can be made, construction will begin. F. P. Roberts, Ed. Wheeler and others are interested. The capital stock is $25,000.

PRESTON, QUE.—George Pattinson & Co. are having plans drawn for the remodeling of their plant and building an addition. The mill, which is now used for warp and wash rooms will be removed and a structure of the size required for carding and spinning will be erected on the site, while an additional story will be put on the front part of the main mill, the back remaining the same height as at present.

ST. THOMAS, ONT.—The Monach Knitting Co., of Dunnville, plans to establish a branch factory here, to cost $60,000. The Industrial Committee of St. Thomas is interested.

MISCELLANEOUS CONTRACTS.

(*Denotes *that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

HEAD GATES, ETC.—Augusta, Me.—See item under Manufacturing Plants.

BATH HOUSE.—Lowell, Mass.—The city is considering the construction of a bath house on South Common.

PARK DEVELOPMENT.—Lowell, Mass.—The Committee on Appropriations on Oct. 31 voted to recommend a loan of $10,000 for preliminary work in the development of Shedd Park.

BALLOON.—Boston, Mass.—Charles J. Glidden, Pres. Aeronautical Association, Boston, has been authorized to secure bids for a hydrogen balloon of 200,000 cu. ft. capacity.

PIER.—Boston, Mass.—C. M. LEACH, Boston, has been awarded the contract for improvements to pier No. 1 at the Boston navy yard. List of bidders noted on Oct. 27.

*RIPRAP STONE.—Boston, Mass.—Bids were received, as follows, on Nov. 12, by Col. Frederic V. Abbot, Corps Engrs, U. S. A., Boston, for riprap stone at Lovells Island and Long Island, Boston Harbor: (a) price per ton of 2,000 lbs. at Lovells Island; (b) at Long Island: W. H. Ellis, 18 Tremont St., Boston, (a) $2.08, (b) $2.18; The Breakwater Co., Arcade Block, Philadelphia, Pa., (a) $2.57, (b) $2.57; John Cashman & Sons Co., Quincy, Mass., (a) $2.47, (b) $2.75; Rowe Bros. Co., Richmond, Me., (a) $2.19, (b) $2.19.

HOOK AND LADDER TRUCK.—Providence, R. I.—Bids are asked by the Board of Contract and Supply until 2 p. m., Nov. 21, for one horse-drawn hook and ladder truck.

FIRE WAGON.—Providence, R. I.—Bids are asked by the Board of Contract and Supply until 2 p. m., Nov. 21, for a motor-driven combination wagon for the Board of Fire Commissioners. William C. Pelky is Clk.

*DREDGING.—Providence, R. I.—Bids will be received by Lieut.-Col. J. C. Sanford, Corps Engrs., U. S. A., Newport, R. I., until 2 p. m., Dec. 17, for dredging in Providence River and Harbor, R. I.

BATH HOUSE.—Rockaway Park (L. I.), N. Y.—Plans for a bath house for the Rockaway Improvement Co. are being prepared by James Cantwell, 192 Broadway, New York.

*DREDGING.—Fort H. G. Wright, N. Y.—Bids will be received by Capt. F. T. Arnold, Constr. Q. M., U. S. A., New London, Conn., until 11 a. m., Nov. 30, for dredging harbor at Fort H. G. Wright.

*HARBOR LINES.—New York, N. Y.—The New York Harbor Board will give a public hearing at 10 a. m., Nov. 29, in Room 809, Army Bldg., 39 Whitehall St., New York, to consider the locations to be recommended for the establishment of U. S. harbor lines for Jamaica and Sheepshead Bays. Interested parties are invited to attend. Col. Wm. T. Rossell, Corps Engrs., U. S. A., is Senior Member of Board.

TRI-BOROUGH SUBWAY.—New York, N. Y.—The Chief Engineer of the Public Service Commission made his report to the Commission regarding the unbalancing of bids on Nov. 14. The Commission is now considering the bids with a view to awarding the contract.

ENGINES.—New York, N. Y.—Bids are asked until 11.30 a. m., Nov. 29, by R. Waldo, Fire Comr., for furnishing and delivering two gasoline propelled and pumping engines.

GYMNASIUM EQUIPMENT.—New York, N. Y.—Bids will be received by George McAneny, Pres. Boro. Manhattan, until 2 p. m., Nov. 29, for furnishing, delivering and installing gymnasium equipment and appurtenances in the Public Bath Buildings at the following locations: 83 and 85 Carmine St., 5 Rutgers Pl., corner Cherry and Oliver Sts., 342 to 348 East 54th St.

MARKET HOUSE REPAIRS.—New York, N. Y.—Bids will be received by George McAneny, Pres. Boro. Manhattan, until 2 p. m., Nov. 29, for labor and materials required to remove, repair and reset present skylight glass and provide and erect new skylights and bars, repair sheet metal work, furnish new gutters and spouts, repair present sheet metal work and skylight louvres and paint the same at the Washington Market, located at Washington, Fulton, Vesey and West Sts., Boro. Manhattan.

HOSE WAGONS.—New York, N. Y.—Bids will be received by the Fire Commissioner until 10.30 a. m., Nov. 23, for furnishing and delivering two automobile hose wagons.

OPERATING ROOMS.—New York, N. Y.—Bids for furnishing all the labor and materials required for the erection and entire construction of operating rooms and accessories in the cupola of the Metropolitan Hospital, Blackwells Island, were received on Nov. 3 by the Department of Public Charities as follows: C. L. Dooley, $17,924; J. M. Knopp, $17,880; Thomas B. Leahy Bldg. Co., $19,100; A. S. Traub, $17,589; William Horne, 71 West 132d St., New York, $17,400; Charles Wille, $17,850.

BATH HOUSE.—New York, N. Y.—Bids were received as follows on Nov. 9 by Alfred E. Steers, Pres. Boro. Brooklyn, for furnishing all labor and materials for the erection and completion of a municipal bath house on the southeast corner of Concourse Drive and West Fifth St., Coney Island, Boro. Brooklyn: (a) with eight metal lockers, (b) with eight asbestos lockers, (c) with four metal lockers, (d) with four asbestos lockers: Luke A. Burke & Sons, (a) $172,000, (b) $200,000, (c) $166,192, (d) $192,000; William Werner, (a) $183,400, (b) $203,600, (c) $171,000, (d) $191,600; T. J. Buckley, (a) $170,900, (b) $227,900, (c) $166,900, (d) $214,900; James R. Sheehan, (a) $234,000, (b) $254,000, (c) $224,000, (d) $244,000; Kelly & Kelley, (a) $186,446, (b) $237,341, (c) $178,966, (d) $225,116; North Eastern Construction Co., (a) $167,480, (b) $218,942, (c) $162,460, (d) $206,817; Concord Construction Co., (a) $207,612, (b) $96,400 (add), (c) $7,160 (deduct) (d) $84,550 (add); Charles Wille, (a) $229,980, (b) $273,020, (c) $221,495, (d) $259,695; Industrial Engineering Co., (a) $210,116, (b) $242,116, (c) $190,816, (d) $237,375; Lipman Contracting Co., (a) $182,000, (b) $224,000, (c) $168,800, (d) $213,000; C. H. Peckworth, (a) $197,320, (b) $19,081 (add), (c) $13,000 (deduct), (d) $7,000 (add); R. E. Henningham, (a) $210,000, (b) $240,000, (c) $198,000, (d) $227,000.

ELEVATORS, ETC.—New York, N. Y.—See item under Light and Power Plants.

STEEL SHED.—Elizabeth, N. J.—The lowest bid opened on Nov. 1 by the city for the erection of a 2-story steel frame shed on recreation pier was submitted by E. H. Brooks & Co. W. H. Luyster is City Surv.

PIER.—Ventuor City, N. J.—The city is considering the construction of a large pier for public use. Plans have been prepared. Piling and cross beams will be of concrete.

DREDGING.—Newark, N. J.—The contract for dredging 12,500 cu. yds. in the Passaic River has been awarded by the Board of Street and Water Commissioners to R. G. PACKARD CO., Bayonne, N. J. M. B. Sherrerd is Ch. Engr.

*TRENCHING. — Chambersburg, Pa.— The H. C. Brooks Co., Chambersburg, has five miles of water line trench, 4 to 5 ft. deep, in open country through farms, which it would like to sublet to trenching machine contractors. Advertised last week.

*DREDGING.—Wilmington, Del.—Bids are asked by Maj. P. R. Raymond, Corps Engrs., U. S. A., Wilmington, until noon, Dec. 10, for dredging harbor at Wilmington.

*DREDGING.—Wilmington, Del.—Bids were received on Nov. 8 by Maj. R. R. Raymond, Corps Engrs., U. S. A., for dredging Tuckerton Creek and Toms River, N. J. The contract has been awarded to the PENNSYLVANIA DREDGING CO., Camden, N. J., at 24 cts. per cu. yd., place measurement, for Toms River and 19 cts. for Tuckerton Creek.

DOCK IMPROVEMENT.—Baltimore, Md.—The citizens on Nov. 8 voted to issue $2,000,000 of bonds for dock improvements. B. T. Fendell is City Engr.

DREDGING.—Baltimore, Md.—The contract for dredging in Patapsco River, Md., about 400,000 cu. yds., has been awarded to the MARYLAND DREDGING & CONTRACTING CO., Baltimore, at 15 cts. per cu. yd. List of bidders noted on Oct. 27.

LETTER BOX POSTS.—Washington, D. C.—Bids were opened on Nov. 4 by the Purchasing Agent, Post Office Department, Washington, for furnishing 2,000 letter box posts as follows: E. P. Puderbaugh, Schenectady, N. Y., $2.46 each; Diamond Steel Pole Co., Philadelphia, Pa., $1.35, $1.95, $1.95 and $2.45 plus 10 cts. each for attaching fasteners; Schoellhorn-Arbrecht Machine Co., St. Louis, Mo., $2.50, $2.75, $3, $3.25, $3.55, and $3.85; American Steel Post Co., Los Angeles, Cal., 75 cts. each f. o. b. Chicago, Ill.; Globe Foundry Co., Portchester, N. Y., $5.40; Albert A. Kellogg, Trenton, Mo., $3.15; Bond Steel Post Co., Adrian, Mich., $1.25, $1.70 and $1.55.

LUMBER.—Washington, D. C.—Bids are asked by the Bureau of Supplies and Accounts, Navy Dept., Washington, until 10 a. m., Nov. 22, for white pine (Schedule 30, 60).

DITCHES.—Chadbourn, N. C.—The Chadbourn Drainage District has awarded the contract to the BRETT ENGINEERING & CONTRACTING CO., Wilson, N. C., for constructing 13 drainage canals, ranging from 4 ft. to 10 ft. wide and from 2 ft. to 8 ft. deep. Estimated cost, $30,000. Bids were opened on Nov. 1.

*DREDGING.—Wilmington, N. C.—Bids were received by Capt. Earl I. Brown, Corps Engrs., U. S. A., Nov. 12, as follows, for dredging Smiths Creek Harbor, Morehead City and harbor and Beaufort Harbor: (a) Smiths Creek; (b) Morehead City Harbor; (c) Beaufort Harbor: P. Sanford Ross, Inc., Jersey City, (a) 20.5 cts., (b) 20.5 cts., (c) 20.5 cts.; Mitchell & Co., 2 Stone St., New York, (a) 10.5 cts., (b) 10.5 cts., (c) 10.5 cts., (recommended for award); N. Rieley & Sons, Ventnor, N. J., (a) 11.8 cts., (b) 11.8 cts., (c) 11.8 cts.; Minor Engineering Co., Washington, D. C., (a) 12 cts., (b) 13.2 cts., (c) 15.8 cts.; W. H. French, Berkeley, Va., (a) 12.3 cts., (b) 12.3 cts., (c) 12.3 cts.; Hillsboro Dredging Co., Tampa, Fla., (a) 10 cts., (b) 16.75 cts., (c) 13.5 cts.; Maryland Dredging & Contract Co., Baltimore, Md., (a) 10.5 cts., (b) 11 cts., (c) 10.5 cts.

DRAINAGE CANAL.—Howard, Miss.—Bids will be received until Dec. 9 by the Black Creek Drainage Commissioners for digging a canal from Howard, Miss., to Tchula Lake. James F. Fontaine is Ch. Engr., Lyon, Miss.

EARTHWORK.—New Orleans, La.—ISRAEL R. BOBBITT, Point Pleasant, La., has been awarded the contract for 36,000 cu. yds. of levee work in the La Fourche Levee District. List of bidders noted on Nov. 10.

STREET SIGNS.—Louisville, Ky.—The Board of Public Works will award contract soon for street signs. Estimated cost, $15,000.

LEVEE.—Lancaster, Ohio.—Bids will be received by the Board of Commissioners of Fairchild County until 10 a. m., Dec. 5, for the construction of a levee upon and along the public highway near the state dam, in Violet Township. H. C. Belt is Clk.

VACUUM CLEANING SYSTEM.—Columbus, Ohio.—Bids will be received by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 5, for the installation of a vacuum cleaning system in the United States post-office and court-house at Columbus, in accordance with drawing and specification, copies of which may be had at the office of the Supervising Architect or at the office of the Superintendent, Columbus, at the discretion of the Supervising Architect.

PIERS.—Cleveland, Ohio.—The Cleveland Electric Illuminating Co. will construct two piers in connection with the erection of its new power pant at the foot of East 70th St.

PROTECTION PIERS.—Toledo, Ohio.—The contract for protection piers in Lake Erie, near here has been awarded by Lucas County to JAMES LEGGETT, Toledo, at $3,400. Bids were opened on Nov. 14. J. B. Marston is County Engr.

DAM.—Cincinnati, Ohio.—Bids were received as follows on Nov. 5 by Maj. John C. Oakes, Corps Engrs., U. S. A., for constructing a dam of concrete at the head of Buffington Island, Ohio River: New Jersey Foundry & Machine Co., New York, $31,639; Pennsylvania Contracting Co., $40,215.

*GUIDE WALLS, ETC.—Cincinnati, Ohio.—Bids were received on Nov. 8 by Maj. John C. Oakes, Corps Engrs., U. S. A., for constructing guide walls and service bridge at Lock No. 1, Big Sandy River, near Catlettsburg, Ky., as follows: New Jersey Foundry & Machine Co., New York, $27,390; Skene & Richmond, Evansville, Ind., $28,610.

STEAMER.—Detroit, Mich.—Frank E. Kirby, Naval Engr., Detroit, has prepared plans for a new passenger steamer, 240 × 60 ft., for the firm of Ashely & Austin, care of Ed. Dustin, foot of First St. The contract has been let to the DETROIT SHIP BUILDING CO. Cost, $275,000.

*BREAKWATER. — Detroit, Mich.—Bids were received as follows on Nov. 10 by Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, for constructing a rubble mound breakwater at Mission Point, Mackinack Island, Mich.: T. L. Durocher, Sault Ste. Marie, Mich., $2.87 per ton; The Green Stone & Quarrying Co., Sawyer, Wis., $1.90; Greiling Bros. Co., Green Bay, Wis., $1.58; Great Lakes Dredge & Dock Co., Chicago, Ill., $1.29.

BREAKWATER.—North Chicago, Ill.—The City Council has awarded contract to GALLOWAY & SONS, Racine, Wis., for the construction of a 300-ft. diagonal breakwater, at the foot of Third Ave.

DAM.—Momence, Ill.—The contract has been awarded by the city to MARK A. HOAG, Momence, for the construction of a dam here. Estimated cost, $3,000.

OIL STORAGE SYSTEM.—Rock Island, Ill.—Bids are asked by Lieut.-Col. F. E. Hobbs, Ordnance Dept., Rock Island Arsenal Rock Island, until 2 p. m., Dec. 7, for furnishing and installing an oil storage system at Rock Island Arsenal.

MOTOR CARS.—Chicago, Ill.—The Falkenau Electrical Construction Co., 617 Stock Exchange Building, is inviting bids for six cars for the Alton, Jacksonville & Peoria Ry., the plans and specifications for which have been prepared by Mr. H. A. Strauss, Vice-Pres. and Ch. Engr. of the construction company. The cars will be 55 ft. long, seating 42 passengers, and will be equipped with four Westinghouse interpole motors (No. 306), electro-pneumatic control, automatic air brakes and steel trucks.

POLICE ALARM SYSTEM.—Racine, Wis.—Contract has been awarded to the DEANE ELECTRIC CO., Elmira, Ohio, for installing a flash-light police alarm system here at $5,000.

HYDRAULIC DREDGE.—Duluth, Minn.—The Zenith Dredge Co., Duluth, will award contract soon for the construction of a large hydraulic dredge. A. S. McDonald is Gen. Mgr.

DITCH.—Marshall, Minn.—All bids opened on Nov. 4 for the construction of judicial ditch No. 9, about 797,381 yds. of excavation, have been rejected by the county. New bids are asked until Dec. 8. Estimated cost, $81,291. A. G. Lundgren is County Audr.

DRAINAGE DISTRICT.—Erie, Kan.—W. E. Adamson, County Surv., Erie, has completed surveys and estimates for the Verdigris Valley drainage district No. 3, which will extend about five miles along the Verdigris River.

FLOOD PROTECTION.—Kansas City, Kan.—The Kaw Valley Drainage Board, Kansas City, has awarded the contract for flood protection work to CALLAHAN BROS., Omaha, Neb. The contract includes the construction of solid dikes along both banks of the Kaw River, from Turner, the west end of the district to the mouth of the river and the removal of all solid obstructions in the river.

DITCH.—Pine Bluff, Ark.—Bids will be received until Dec. 1 by the Commissioners of Drainage District No. 1, of Lincoln County, Pine Bluff, for constructing a main and several lateral ditches. The work consists of about 19,000 ft. of main and 28,200 ft. of lateral ditches, requiring about 87,000 cu. yds. excavation. W. J. Parkes is Engr., Main St., Pine Bluff.

DRAINAGE CANAL.—Jonesboro, Ark.—Birch Creek Drainage District No. 7 has awarded the contract to J. B. WALKER at 15⅝ cts. per cu. yd. for constructing a drainage canal five miles long, 3 ft. wide at bottom and 15 ft. at top, with average depth of 3 ft., requiring about 50,000 cu. yds. of dredging.

DRAINAGE DITCHES.—Batesville, Ark.—Lund & Hill, Consult. Engrs., Little Rock, Ark., will let contracts at the Court-house, Batesville, for drainage ditches of District No. 4, Independence County, on Nov. 22. These ditches are about seven miles long and estimated to cost $18,000.

AUTOCHEMICAL WAGON. — Brenham, Tex.—The city has awarded contract to the STUDEBAKER MFG. CO. for an autochemical and hose wagon. Estimated cost, $5,000.

CULVERT.—Fort Sam Houston, Tex.—Bids are asked by Capt. P. W. Guiney, Constr. Q. M., U. S. A., Fort Sam Houston, until 11 a. m., Nov. 18, for enlarging the concrete culvert on Road No. 10.

FLAGSTAFF.—Fort Sam Houston, Tex.—Bids are asked by Capt. Fred. H. Gallup, Q. M., U. S. A., Fort Sam Houston, until Dec. 2, for the erection of a 100-ft. iron flagstaff. The work includes supplying material, necessary foundation, erecting, painting, etc.

DITCH.—Aztec, N. Mex.—Bids will be received until Nov. 19, for the enlargement and extension of the Kelo Blancett ditch; also for the construction of laterals on the Crouch Mesa. Bids will be received for all or part of this work. For further particulars apply to W. S. Walker, Aztec.

AIR PUMP, ETC.—Seattle, Wash.—The contract for air pump, etc., for the cable ship "Burnside," has been awarded to the NICKERSON-McFARLANE CO., Tacoma, at $5,591. Noted on Nov. 3.

CONCRETE PIERS, ETC.—Seattle, Wash.—James A. Murphy, Pres. American Savings Bank & Trust Co., it is reported, has purchased the site of the Moran Co.'s ship yard for $2,500,000. It is planned to build concrete piers, warehouses and railway facilities to cost about $2,000,000.

BREAKWATER.—Eugene, Ore.—Included in the plans of the Northwestern Corporation in building its new plant near the old one at the east end of Eighth St., is the construction of a 400-ft. concrete breakwater.

PIER.—San Francisco, Cal.—The Harbor Commissioners are having soundings made for the construction of pier 32, between Main and Beale Sts. Marsden Manson is City Engr.

FOUNTAIN.—Los Angeles, Cal.—Native Sons will erect a $16,000 fountain here. It is to be known as "The Bear Hunt," in bronze. Randall Philips, 1329 San Julian St., Los Angeles, is interested.

JETTIES.—Los Angeles, Cal.—Application for permission to construct at Sunset Beach, Orange County, seven jetties to extend seaward a distance of 50 ft. beyond high-water mark has been made by the Sunset Land Co. at the office of Capt W. P. Stokey, Corps Engrs., U. S. A., Central Bldg.

DREDGING.—Los Angeles, Cal.—Bids were received by Capt. W. P. Stokey, Corps Engrs., U. S. A., Nov. 7, for dredging Los Angeles harbor. The bids follow: San Francisco Bridge Co., Monadnock Bldg., San Francisco, 43¾ cts.; North American Dredging Co., of Nevada, Central Bldg., Los Angeles, $140,000 for the work; Tacoma Dredging Co., Tacoma, Wash., 44¼ cts.; Standard American Dredging Co., Merchants' Exchange, San Francisco, 42 cts.; American Dredging Co., 95 Market St., San Francisco, 47¼ cts. Amount available for the work $140,000.

LEVEES. — Marysville, Cal. — The Yuba County Board of Supervisors propose to erect levees that will protect the land from overflow waters and construct a canal that will carry away the flood water coming in from the creeks and return it to the Bear River.

LEVEE WORK.—Yuma, Ariz.—Bids for levee work along the west bank of the Colorado River, beginning at a point on the levee of California Development Co., about eight miles below the international boundary line, and extending southward 25 miles, requiring about 1,300,000 cu. yds. of embankment, will be received at the office of J. A. Ockerson, Engr. in Charge, at Yuma, until noon, Nov. 25th. Information concerning proposed work may be had on application at the office of the Secretary of the Interior, Washington, D. C., and at the office of the engineer in charge, Yuma. Specifications for the proposed work may be examined at the office of the Chief of Field Division, General Land Office, Butler Bldg., San Francisco.

CONCENTRATOR AND SEPARATOR.—Goodsprings, Nev.—The Yellow Mine, T. F. Kent, Mgr., Goodsprings, will have a modern concentrator and separator plant erected here.

WHARF.—St. Joseph de Letellier, Que.—Bids will be received until Dec. 6, by the Public Works Department, R. C. Desrochers, Secy., Ottawa, for constructing a wharf at St. Joseph de Letellier, Saguenay County, Que. Plans at office of J. L. Michaud, Dist. Engr., Merchants' Bank Bldg., Montreal.

LANDING PIER.—Stratford, Que.—Bids will be received until Dec. 5 by the Public Works Department, R. C. Desrochers, Sec., Ottawa, Ont., for the construction of a landing pier at Stratford, Wolfe County, Que. Plans at office of J. L. Michaud, Dist, Engr., Montreal.

REVETMENT WALL.—Hamilton, Ont.—The contract for building the revetment wall at the beach, has been let to JOSEPH BATTLE, at $25,000. The wall is to be 1,600 ft. long.

RAISING STEAMER.—Sarnia, Ont.—The REID WRECKING CO., Sarnia, have secured the contract for raising the steamer W. C. Moreland, now on the rocks at Eagle River, Keweenaw Point. The company will receive either $75,000 for delivering the wreck at Superior, Wis., or 65% of what the company saves at the option of the underwriters. Work will start at once.

CANAL.—Welland, Ont.—Work is about to be commenced drilling test holes on another route for the proposed new or enlarged Welland Canal, the course being west of the present canal and the old canal.

EXTENSION TO BREAKWATER.—Lorneville, N. B.—Bids are asked until Nov. 23 for extension to the breakwater here by the Department of Public Works, Ottawa, Ont. R. C. Desrochers, Secretary.

TRAIN SHED.—Winnipeg, Man.—The contract for the train shed for the Canadian Northern Ry. Co., 150 ft. long, has been let to the MANITOBA IRON BRIDGE Co. Approximately 1,650 tons of steel are required for the work. The company has also been awarded the contract for the Canadian Northern Railway freight sheds.

STEAM ROLLER.—North Vancouver, B. C.—Bids have been received as follows by the city for a 15-ton steam roller: Waterous Engine Co., Ltd., Vancouver, $3,500; Buffalo Steam Roller Co., $4,250; Canada Foundry Co., $3,900; Mussels, Ltd., gas motor roller, $3,290; Western Engineering Co., $2,860.

STEEL BARGE.—Nelson, B. C.—CUNNINGHAM & OLIVER, Nelson, have secured the contract for building a steel barge here for the Canadian Pacific Ry Co. Cost, $20,000.

ENLARGING DRY DOCK.—Halifax, N. S.—The Government is planning to enlarge the dry dock here with a view to the requirements of the Canadian Navy.

OIL RESERVOIR, STORAGE TANKS.—Tampico, Mex.—A 1,000,000-bbl. concrete reservoir for the storage of oil is to be erected for the Hausteca Oil Co., along the banks of the Panuco River, opposite Tampico. CARL LEONARDT, Los Angeles, Cal., is the contractor. In addition to the storage capacity of the reservoir, the company also has arranged for the construction of six 55,000-bbl. steel storage tanks to be added to the five huge tanks which recently were completed. H. G. Wylie is Gen. Mgr., Tampico.

FOREIGN CONTRACTS.

(To insure prompt attention, letters on consular business should be addressed to The American Consul at ———, ———. Such letters are opened and attended to by whoever may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes. If, in the meantime, he should have gone out of office, the matter may wholly escape attention.)

PUMPS.—England.—Bids are asked by the City Surveyor until Nov. 21 for the supply and erection of two motor-driven centrifugal pumps for the city of Wakefield.

METAL SUPERSTRUCTURES FOR BRIDGES.—Uruguay.—Bids are asked until Jan. 17 by the Secretary General Departmento Nacional de Ingenieros, Montevideo, Uruguay, for metal superstructure for bridges.

TRAMWAY PLANT AND EQUIPMENT.—England.—Bids will be received until Jan. 9, by W. Coward & Co., 91 Finsbury Pavement, London, E. C., Eng., for a tramway (electric street car) plant and equipment. Specifications can be obtained of W. Coward & Co., upon the payment of £1.

MUNICIPAL ELECTRIC STREET CAR SYSTEM.—Japan.—An American consular officer in Japan has stated that a local City Council and City Assembly, are planning the construction of an electric street-car system, estimated to cost $4,500,000. No detailed specifications have as yet been prepared. A modern electric rapid-transit system is desired, with connecting lines to all important suburban points. A bond issue is proposed. Total mileage contemplated, 18½.

EXAMINATIONS.

PHYSICAL LABORATORY HELPER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination, on Jan. 4, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Laboratory Helper in the Bureau of Standards, Department of Commerce and Labor, at $720 a year. The examination will consist of the subjects mentioned below, weighted as indicated: Spelling, 10 points; arithmetic, 10 points; letter writing, 10 points; penmanship, 10 points; copying from plain copy, 10 points; training and experience, 50 points. Applicants must have reached their 18th birthday. Examination form 1312.

MECHANICAL CHART DRAFTSMAN.—Washington, D. C.—The U. S. Civil Service Commission announces an examination, on Jan. 4, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Mechanical and Chart Draftsman, Weather Bureau, Department of Agriculture, and other departments of the government. The entrance salaries of this position range from $1,000 to $1,200 a year. The examination will consist of the subjects mentioned below, weighted as indicated: Mechanical drawing (making finished drawing from sketch furnished), 50 points; Map and chart drawing, 50 points. Persons who have had experience in lithographic and transfer work, other qualifications being equal, will be preferred in selection. Applicants must have reached their 18th birthday. Examination form 1312.

METALLURGICAL CHEMIST AND ASSAYER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination, on Jan. 4, to secure eligibles from which to make certification to fill a vacancy in the position of Metallurgical Chemist and Assayer at $1,800 a year, in the office of the Appraiser of Merchandise, Customs Service, New York, N. Y., and vacancies requiring similar qualifications as they may occur in the Customs Service throughout the United States, unless it shall be decided in the interest of the service to fill the vacancy by reinstatement, transfer, or promotion. The examination will consist of the subjects mentioned below, weighted as indicated: Chemical arithmetic, 25 points; practical questions, 50 points; training and experience, 25 points. Applicants must have reached their 21st, but not their 55th, birthday. Examination form 1312.

SUPERINTENDENT OF CONSTRUCTION.—Washington, D. C.—The U. S. Civil Service Commission announces the change of title of the Assistant Superintendent of Construction announcement to that of Superintendent of Construction, also the postponemone to Dec. 7 of the examination scheduled for Nov. 9, to secure eligibles from which to make certifications to fill a vacancy in the position of Superintendent of Construction, U. S. Penitentiary, McNeil Island, Wash., at $5 a day, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interest of the service to fill the vacancy by reinstatement, transfer, or promotion. The examination will consist of the subjects mentioned below, weighted as indicated: Architectural construction and details, 50 points; training and experience, 50 points. Applicants must have reached their 20th birthday. Examination form 1312.

MECHANICAL DRAFTSMAN.—Washington, D. C.—The U. S. Civil Service Commission announces an examination, on Jan. 4-5, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Mechanical Draftsman in the Isthmian Canal Service. The entrance salaries of the positions to be filled as the result of this examination are as follows: Mechanical Draftsman, first class, $150 a month; second class, $125 a month; tracer, $100 a month. This examination will consist of the subjects mentioned below, weighted as indicated: Mathematics and practical calculations, comprising arithmetic, algebra to and including problems involving quadratics, geometry, mensuration, logarithms and use of tables, elementary problems in mechanics, and use of slide rule and the interpretation of formulae and correct working out of results in special cases, 25 points; materials, comprising all the materials used in machine construction, 15 points; drawing, involving a competent knowledge of machine construction and ability to draw neatly to scale, 25 points; training and experience, 35 points. Examination form 1312.

ASSISTANT IN DAIRY BACTERIOLOGY AND ASSISTANT IN DAIRY CHEMISTRY.—Washington, D. C.—The U. S. Civil Service Commission announces an examination, on Dec. 17, to secure eligibles from which to make certifications to fill a vacancy in the position of Assistant in Dairy Chemistry, at $1,200 a year, at Madison, Wis., and one in the position of Assistant in Dairy Bacteriology, at $1,440 a year, in Washington, D. C., both under the Bureau of Animal Industry, Department of Agriculture, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interest of the service to fill either or both of the vacancies by reinstatement, transfer, or promotion. Competitors will not be assembled for any of the tests. The examination will consist of the subjects mentioned below, weighted as indicated: General education, 20 points; special education (special work in bacteriology or chemistry, including undergraduate, graduate, and thesis work), 35 points; experience in bacteriology or chemistry, not covered under 1 and 2, including teaching, research work, and commercial work (published works should be submitted), 20 points; outline of a plan for solving a problem in bacteriology or chemistry, 15 points; original thesis of not less than 1,000 words, 10 points. Applicants must have reached their 20th, but not their 50th, birthday. Examination form 304, and special form.

NEW YORK STATE.—The Civil Service Commission of the State of New York will hold examinations in various cities, Dec. 15, for the positions indicated below. Application must be filed before 12 m., Dec. 8, on blanks provided by the department.

Assistant Electrical Engineer, State Hospitals, Departments and Institutions. Usual salaries, $600 to $900 and maintenance. Candidates who are graduates in mechanical or electrical engineering of duly established schools of technology must have had one year's practical experience in electrical work or in the operation of stationary steam engines and electrical machinery. Other candidates must have had two years' practical experience as engineer or electrician, including at least one year in the operation of stationary engines or electrical machinery. Subjects of examination and relative weights: Practical and technical questions on electricity, electrical machinery and apparatus, steam engines, etc., 6; experience and education, 4.

Chemist, Department of Agriculture. Salary, $1,200. Subjects of examination and relative weights: Chemistry, with special reference to analysis of food and dairy products, 8; education, experience and special qualifications, 2. No sample questions.

Gas Meter Tester, Public Service Commissions. Salary, $900 to $1,200. Candidates must be competent mechanics, familiar with the construction and testing of gas meters. Subjects of examination and relative weights: Questions relating to the testing, readjustment, proving and mechanism of gas meters, reading of meter dials, etc., 5; experience and personal qualifications, 5. No sample questions.

CONTRACT PRICES

(* *Denotes that this work is advertised in Engineering News.*)

DAM.—CINCINNATI, OHIO.—Bids were received Nov. 5 by Major John C. Oa Corps of Engrs., U. S. A., for a concrete dam at the head of Buffington Island, Ohio River, from: (A) New Jersey Foundry & Machine Co., New York, N. Y.; (B) Pennsylvania Contracting Co., Pittsburg, Pa. The itemized bids were as follows:

	A	B
5,300 cu. yds. excavation	$0.	$2.00
86 piles, each	11.	15.00
6,000 lbs. iron tie rods	.	.06
450 cu. yds. gravel filling	.	1.25
1,500 cu. yds stone ft., 9 to 13 ft. each	6.	4.00
820 cu. yds. stone, ¾ to 3 cu. ft. each		
1,720 cu. yds, concrete	7.17	10.50
25 bbls. extra cement, per bbl.	2.	2.50
Totals	$31,63	0,215

SEWERS.—East St. Louis, Ill.—Bids were received Oct. 19 for a sewer on Bra Ave., from Main to 10th Sts., The bidders were: (A) C. A. HORN (awarded contract); (B) J. & P. Keeley; (C) Meyer & Thoma; (D) Gaynord & Sweeney; (E) Walter C nan; (F) Meyers' Construction Co. The itemized bids were as follows:

	A	B	C	D	E	F
3,560 lin. ft. 6 in. vitrified sewer pipe, per lin. ft.	$0.25	$0.30	$0.32	$0.37	$0.30	$0.40
300 lin. ft. 10 in. vitrified sewer pipe, per lin. ft.	.40	.52	.61	.60	.50	.60
300 lin. ft. 12 in. vitrified sewer pipe, per lin. ft.	.65	.75	.75	.70	.65	.70
400 lin. ft. 15 in. vitrified sewer pipe, per lin. ft.	.80	1.10	.94	.90	.90	.90
4,850 lin. ft. sandstone curb, per lin. ft.	.62	.65	.62	.65	1.62	.63
4 c.-i. caps (heavy), each	8.00	13.00	15.00	14.00	14.00	15.00
8 sandstone inlets, each	14.00	17.00	17.50	15.00	14.00	12.00
28 cu. yds. brick masonry	9.00	9.00	9.00	9.00	9.00	9.00
600 cu. yds. excavation placed in fill	.25	.25	.35	.25	.25	.20
6,630 cu. yds. filling	.50	.53	.58	.60	.50	.58
9,020 sq. yds. paving (Albion)	1.50	1.59	1.53	1.72	1.60	..
9,020 sq. yds. paving (Alton)	1.50	..	..	1.72	..	..
9,020 sq. yds. paving (Banner)	1.50	..	..	..	..	..
9,020 sq. yds. paving (Egyptian)	1.50	1.59	1.55	1.72	..	1.49
9,020 sq. yds. paving (Superior)	1.50	1.59	1.55	1.72	1.65	1.51
9,020 sq. yds. paving (Terre Haute)	..	..	..	..	..	..
9,020 sq. yds. paving (Wabash)	..	..	..	..	..	..
9,020 sq. yds. paving (Indiana)	..	1.62	..	.	1.60	1.54
9,020 sq. yds. paving (Clinton)	1.50	..	..	..	..	..
Totals	$21,923	$23,487	$23,419	$25,299	$23,097	$22,844

SEWERAGE SYSTEM.—Eastman, Ga.—Bids were opened Nov. 1 by Arthur Pew for a sewerage system at Eastman, Ga. The bidders were: (A) Geo. H. Palmer, Opelika, Ala.; (B) F. M. BENNER, Marion, Ind. (awarded contract); (C) Dysard Construction Co., Atlanta, Ga.; (D) Abec Bros. & Hart, Hickory, N. C.; (E) Edwards Construction Co., Hickory, N. C.; (F) Bryan & Co., Jacksonville, Fla.; (G) J. D. Cranford & Co., Macon, Ga.; (H) Carolina Construction Co., Florence, S. C.; (I) J. Whitt Curley & Co., Mobile, Ala.; (J) M. P. Flynn & Co., Chattanooga, Tenn.; (K) Municipal Engineering & Construction Co., Charleston, S. C.; (L) Sullivan & Long, Bessemer, Ala.; (M) I. C. Mishler, Chattanooga, Tenn.; (N) P. J. Curran, Knoxville, Tenn.; (O) Mann & Sarvey, Knoxville, Tenn.; (P) Geo. H. Crafts & Co., Dublin, Ga.; (Q) Charleston Engineering & Construction Co., Charleston, S. C.; (R) Noll Construction Co., Chattanooga, Tenn.; (S) Newman Sewer Construction Co., Evansville, Ind.; (T) John R. Jeffrey, Elberon, N. J.; (U) J. H. Hargrove & Sons, Eastman, Ga. The itemized bids were as follows:

SEWERAGE SYSTEM, EASTMAN, GA.

	A	B	C	D	E	F	G	H	I	J	K
26,300 ft. 8-in. pipe (depth less than 6 ft.)	$0.22	$0.25	$0.28	$0.25	$0.27	$0.27	$0.33	$0.30	$0.30	$0.32	$0.25
4,800 ft. 8-in. pipe (depth, 6 to 8 ft.)	.35	.30	.37	.33	.33	.35	.34	.36	.35	.39	.34
1,700 ft. 8-in. pipe (depth, 8 to 10 ft.)	.41	.42	.46	.45	.45	.45	.36	.47	.42	.48	.39
400 ft. 8-in. pipe (depth, 10 to 12 ft.)	.53	.58	.67	.60	.54	.65	.38	.60	.65	.59	.52
3,400 ft. 10-in. pipe (depth less than 4 ft.)	.26	.26	.27	.30	.28	.33	.38	.32	.39	.32	.38
1,800 ft. 10-in. pipe (depth, 4 to 6 ft.)	.29	.32	.33	.35	.33	.38	.40	.35	.44	.40	.46
500 ft. 10-in. pipe (depth, 6 to 8 ft.)	.35	.40	.41	.39	.37	.45	.42	.40	.47	.47	.50
400 ft. 10-in. pipe (depth, 8 to 10 ft.)	.44	.50	.54	.50	.48	.60	.44	.52	.55	.57	.60
100 ft. 10-in. pipe (depth, 10 to 12 ft.)	.55	.64	.67	.75	.57	.75	.46	.70	.75	.77	.69
3,660 ft. 12-in. pipe (depth less than 4 ft.)	.30	.30	.36	.35	.38	.38	.44	.40	.45	.41	.45
1,200 ft. 12-in. pipe (depth, 4 to 6 ft.)	.34	.38	.41	.40	.38	.44	.46	.45	.50	.48	.55
200 ft. 12-in. pipe (depth, 6 to 8 ft.)	.40	.53	.51	.50	.43	.53	.48	.55	.57	.60	.62
100 ft. 12-in. pipe (depth, 8 to 10 ft.)	.46	.65	.61	.75	.51	.65	.50	.70	.75	.76	.70
1,200 Y's on 8-in. pipe	.42	.30	.25	.35	.38	.30	.45	.20	.45	.30	.45
50 Y's on 10-in. pipe	.62	.40	.30	.50	.55	.50	.60	.25	.65	.35	.55
10 Y's on 12-in. pipe	.82	.60	.40	.70	.75	.60	.80	.35	.85	.40	.65
79 manholes (depth less than 6 ft.)	21.00	25.00	22.50	24.50	26.00	25.00	20.60	30.00	23.00	26.00	38.00
11 manholes (depth, 6 to 8 ft.)	26.00	30.00	27.50	30.00	32.00	30.00	27.60	35.00	27.00	29.00	43.00
5 manholes (depth, 8 to 10 ft.)	27.00	33.50	32.50	38.00	37.00	35.00	36.00	45.00	31.00	34.00	47.00
1 manhole (depth, 10 to 12 ft.)	30.00	38.50	37.50	45.00	45.00	40.00	42.00	55.00	35.00	40.00	56.00
24 flush tanks (depth, 5 ft. or less)	50.00	50.00	40.00	60.00	58.00	55.00	35.00	55.00	60.00	65.00	65.00
50 cu. yds. rock excavation	1.25	3.50	1.50	4.00	4.00	.50	1.50	2.00	4.00	4.00	2.70
1 ton cast-iron pipe	45.00	30.00	40.00	50.00	40.00	40.00	35.00	40.00	90.00	50.00	45.00
4,000 bricks in abutments, per M	15.00	20.00	16.00	15.00	15.00	17.50	15.00	20.00	30.00	15.00	14.50
Totals	$15,912	$17,082	$17,998	$18,148	$18,609	$18,653	$19,628	$19,991	$20,468	$20,870	$20,479

	L	M	N	O	P	Q	R	S	T	U
26,300 ft. 8-in. pipe (depth less than 6 ft.)	$0.30	$0.34	$0.30	$0.38	$0.30	$0.33½	$0.34	$0.39	$0.39	$0.43
4,800 ft. 8-in. pipe (depth, 6 to 8 ft.)	.42	.41	.43	.45	.37	.44½	.38	.49	.49	.52
1,700 ft. 8-in. pipe (depth, 8 to 10 ft.)	.55	.53	.51	.54	.47	.56½	.40	.55	.75	.63
400 ft. 8-in. pipe (depth, 10 to 12 ft.)	.70	.68	.61	.65	.60	.70	.64	.60	1.00	.70
3,400 ft. 10-in. pipe (depth less than 4 ft.)	.38	.32	.42	.40	.30	.40	.38	.48	.40	.46
1,800 ft. 10-in. pipe (depth, 4 to 6 ft.)	.46	.37	.46	.45	.36	.46	.39	.48	.48	.63
500 ft. 10-in. pipe (depth, 6 to 8 ft.)	.56	.47	.50	.53	.44	.52	.40	.50	.60	.73
400 ft. 10-in. pipe (depth, 8 to 10 ft.)	.67	.68	.60	.61	.54	.64	.55	.60	.85	.79
100 ft. 10-in. pipe (depth, 10 to 12 ft.)	.79	.75	.75	.72	.66	.88	.70	.65	1.10	.84
3,660 ft. 12-in. pipe (depth less than 4 ft.)	.45	.37	.50	.47	.40	.51	.38	.50	.44	.54
1,200 ft. 12-in. pipe (depth, 4 to 6 ft.)	.55	.40	.55	.53	.45	.54	.40	.50	.53	.60
200 ft. 12-in. pipe (depth, 6 to 8 ft.)	.65	.52	.60	.61	.53	.63	.60	.60	.69	.70½
100 ft. 12-in. pipe (depth, 8 to 10 ft.)	.75	.75	.70	.70	.63	.75	.75	.70	.89	.82
1,200 Y's on 8-in. pipe	.45	.50	.35	.22	.35	.40	.07	.40	.40	.67
50 Y's on 10-in. pipe	.65	.75	.50	.32	.45	.50	.30	.60	.50	.74
10 Y's on 12-in. pipe	.75	1.00	.65	.46	.60	.60	.40	.70	.60	.83
79 manholes (depth less than 6 ft.)	24.00	26.00	30.00	24.50	47.00	30.00	32.00	32.00	35.00	35.00
11 manholes (depth, 6 to 8 ft.)	27.00	37.50	34.00	29.00	56.00	32.00	36.00	35.00	45.00	37.00
5 manholes (depth, 8 to 10 ft.)	30.00	43.00	37.00	34.00	66.00	35.00	40.00	35.00	53.00	40.00
1 manhole (depth, 10 to 12 ft.)	36.00	43.00	40.00	40.00	77.00	40.00	45.00	35.00	60.00	42.00
24 flush tanks (depth, 5 ft. or less)	55.00	70.00	60.00	40.00	65.00	35.00	75.00	60.00	50.00	42.00
50 cu. yds. rock excavation	1.00	5.00	2.00	1.60	1.00	3.00	3.50	3.00	3.00	2.00
1 ton cast-iron pipe	45.00	60.00	50.00	35.00	50.00	40.00	55.00	30.00	45.00	67.00
4,000 bricks in abutments, per M	17.50	20.00	18.00	16.00	18.00	20.00	15.00	15.00	16.00	18.00
Totals	$20,974	$22,027	$22,069	$22,597	$22,085	$22,378	$22,214	$24,925	$25,324	$25,980

BRIDGE AND GUIDE WALL.—Cincinnati, Ohio.—Bids were received Oct. 8 by Major John C. Oakes, Corps of Engrs., U. S. A., for constructing guide wall and service bridge at Lock No. 1, Big Sandy River, at Catlettsburg, Ky., from (A) New Jersey Foundry & Machine Co., New York, N. Y.; (B) Shane & Richmond, Evansville, Ind. The itemized bids were as follows:

	A	B
9,700 cu. yds. excavation	$0.69	$1.00
200 cu. yds. embankment	1.00	.75
1,835 cu. yds. concrete, plain	5.70	6.00
100 cu. yds. " reinforced	10.70	13.00
140 sq. yds. paving	3.20	2.50
21,000 lbs. iron and steel	.12	.10
2,000 bbls. cement	3.00	2.00
Totals	$27,391	$28,610

U. S. POSSESSIONS.

BUILDING.—Porto Rico.—It is reported that the San Juan branch of the Union Bank of Halifax has been merged with the Royal Bank of Canada and that the latter will construct a large building here and open branches in other towns of Porto Rico.

BOILER, CAR WHEELS.—Panama.—Bids will be received by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., until Nov. 25, for furnishing under circular No. 611b one Scotch marine boiler and 100 20-in. car wheels.

MANGANESE STEEL.—Panama.—Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., has awarded contract for furnishing a number of manganese steel dipper lips, latches and keepers to the TAYLOR IRON & STEEL CO., High Bridge, N. J., at $7,240.

INDUSTRIAL NOTES.

THE HAMMOND IRON WORKS, Warren, Pa., announce that Mr. John M. Nicol has resigned as Mexican representative at La Tacuba C, Mexico City.

H. F. WELLS will represent the Nitro Powder Co., of Kingston, N. Y., in the states of New York, Pennsylvania, Ohio and West Virginia.

THE MOORE LIGHT CO., Newark, N. J., manufacturers of the Moore Light, the vacuum tube, has opened a demonstration sales room at 505 Fifth Ave., New York.

J. S. WORLEY, Pres. of the J. S. Worley Co., Reliance Bldg., Kansas City, Mo., has been retained to assist in the valuation of railroad properties in New York and Pennsylvania.

THE UNION IRON WORKS, HOBOKEN, N. J., manufacturers of Arnott pile hammers, have recently secured the contract to furnish the United States Government with hammers, which will be used to drive the steel piling incident to the raising of the battleship "Maine" in Havana Harbor.

THE AMERICAN BLOWER CO. has recently secured a contract for blowers to be used on the estate of His Imperial Majesty, the Czar of Russia. These will be chiefly used to elevate seed cotton. On the same plantation a complete ginning outfit has been installed, manufactured by the Murray Co., Dallas, Texas.

LIPPINCOTT & McCLAVE announce that they have opened offices at 601 Ideal Bldg., Denver, Colo., where they will engage in the practice of chemical and metallurgical engineering. Special attention will be given to the treatment of complex ores. The firm is composed of Walter B. Lippincott and James M. McClave.

POOLE ENGINEERING & MACHINE CO., Woodberry, Baltimore, announces that owing to the death of Mr. George Poole, president of the company, Mr. Robert Poole Simpson, formerly Vice-President, has been elected President and Treasurer. Mr. John Finney, Secretary of the company, continues his present office, and Mr. Thomas H. Mirkil, formerly General Manager, is now Vice-President and General Manager.

THE HUDSON & MANHATTAN R. R. CO. has extended its lines to 33d St., New York. There are stations at 28th St. and Sixth Ave. and 33d St. and Sixth Ave. The 33d St. station is the most pretentious on the entire system. There are two levels, the upper one being used as a waiting room and concourse, while the lower one is elevated to tracks, loading and unloading platforms. At a later date a baggage service is promised from this station to the railways in New Jerrey.

THE MATERIAL ADVANCEMENT made in sanitization and beautification of cities has nowhere been more forcibly shown than in Rio de Janeiro, the capitol of Brazil. This South American city, which a generation ago was a mediocre seaport, is now a thriving city with well paved streets and many beautiful public buildings. A recent photograph shows a part of the street cleaning department with 25 Studebaker sprinkling carts which were sold by United States firms shortly after the city was reconstructed.

MR. C. E. CROWNOVER, of North Yakima, Wash., has been promoted to the position of Project Engineer in the U. S. Reclamation Service and placed in charge of the Tieton Unit of the Yakima irrigation project, Washington, to take the place of Mr. Conway, who is leaving the service to engage in private work. Mr. Crownover was appointed Engineer in the Reclamation Service in January, 1910, having been previously engaged as Superintendent of Construction. He will be located at Naches, Washington, and will have entire charge of all designing, construction, maintenance and operation work of the Tieton unit, reporting directly to Supervising Engineer Chas. H. Swigart, at North Yakima.

PITTSBURG AND NEW YORK.—A scheme is under way for new passenger service from New York to Pittsburg over the lines of the Central R. R. of New Jersey, the Reading, the New York Central and the Buffalo, Rochester & Pittsburg. From New York the present tracks of the Central R. R. of N. J. would be used from Jersey City to Tamaqua, Pa., a distance of 135 miles. From Tamaqua to Williamsport the tracks of the Philadelphia & Reading road would be used, a distance of 100.5 miles; at Williamsport connections would be made with the New York Central, running over the tracks of this road to Clearfield, a distance of 104 miles. From Clearfield a direct entrance to the Baltimore & Ohio station at Pittsburg could be effected over the lines of the Buffalo, Rochester & Pittsburg, a distance of 159 miles. The total distance from New York to Pittsburg over the new route would be 499 miles. The present routes of the Pennsylvania is 439 miles, while the length of the Baltimore & Ohio, between the two cities, is 528 miles.

TRADE PUBLICATIONS.

DRYING MACHINERY.—Atlas Dryer Co., Cleveland, Ohio. Paper; 9 × 6 ins.; pp. 8; illustrated.

This little pamphlet bears the title of "A Thesis on the Art of Drying." It describes in a very few concise words the general scheme and operation of a 30-ft. cylindrical rotating dryer. The whole of this "thesis" is contained in three pages of print and four half-tone illustrations; nevertheless it will be found interesting reading by those who have materials to dry.

VALVES AND FITTINGS.—Crane Co., Chicago, Ill. Stiff paper; 6¾ × 10½ ins.; pp. 64; illustrated.

This catalog, No. 70, is devoted to cast-steel valves and fittings for high pressure saturated and superheated steam lines and for extreme hydraulic service. Extra heavy flanged straight-way valves, tested to 1,000 lbs. hydraulic pressure and 200 lbs. steam pressure per square inch with the valve open and tested to 500 lbs. hydraulic pressure and 200 lbs. steam pressure per square inch on the disk of the closed valves, are described in detail. Glove and angle, swing check

LIST OF CONTRACTS PENDING.

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
11-19	**Quarters, Mare Island, Cal. (S.)**	10-13
11-19	**Seawall, Norfolk, Va. (S.)**	10-20
11-23*	**Dredging, Boston, Mass. (S)**	10-27
11-23*	**Breakwater, Duluth, Minn (P & S)**	11- 3
11-30*	**Diversion channel, Portland, Ore. (S.)**	9-29
12- 1*	**Headgates, Boise, Idaho, (S)**	10-20
12- 1	**Extending breakwater, Los Angeles, Cal (S)**	11- 3
12- 3	**Coal & Ash handling apparatus, Norfolk, Va. (S)-**	10-27
12- 3	**Boilers, etc., New Orleans, La. (S)**	10-27
12- 3*	Dredging, Newport, R. I. (S.)	11- 3
12- 3	Boilers, wiring, etc., Tiburson, Cal.	11-17
12-10	**Pier, Bremerton, Wash. (S.)**	11-10
12-15*	**Diversion work, Klamath Falls, Ore. (S)**	10-20
1- 7	**Dredging, Hawaii (U. S. Poss.) (S)**	10-27
12-19	Post-office, Lexington, Mo.	11-17
1-31	Court-house, Onida, S. Dak.	10-20
4-15	**Plans, Havana, Cuba**	10-20

Light, Heat and Power Plants.

Bids open.		Noted in issue of
11-18	Generating Unit, Warrensville, O.	11-10
11-18	Electric lamps, -Fergus Falls, Minn.	11-17
11-18	Gas franchise, Corpus Christi, Tex.	11-17
11-19	**Elec. driven pumps, Norfolk, Va.**	10-27
11-21	Elec. lights, wiring, etc., Rochester, N. Y.	11-17
11-22	Feed stokers, Akron, Ohio	11-17
11-23	Wiring, etc., Homestead, Pa.	11-17
11-25	Electrical work, etc., New York	11-17
11-28	Heating repairs, etc., New York	11-17
11-28*	Elec. light, etc., South River, N. J.	10-27
11-28*	Water power, Marshalltown, Ia.	11- 3
11-28	Elec. machinery, San Francisco, Cal.	11- 3
12- 1*	**Heating and vent. system, New York**	10-20
12- 1	**Elec. elevator equip., New York**	10-20
12- 1	Poles, line supplies, Winnipeg, Man.	11-17
12- 3	Boilers, wiring, etc., Tiburson, Cal.	11-17
12- 3	Boilers, etc., New Orleans, La.	10-27
12- 7	Wire and cables, Winnipeg, Man.	11- 3
12- 9*	Heating, New York	11-17
12-12	Franchise, Newport, Cal.	11- 3
12-13	Wiring, Washington, D. C.	11-17
12-24	Street lighting, Boston, Mass.	11-17

Bridges.

11-19	Bridge, Westernport, Md.	11-10
11-19	Bridge, Ft. Wayne, Ind.	11-17
11-28	Bridge, Wallachin, B. C.	11- 3
11-28	**Bridge, Victoria, B. C.**	11-10
12- 1	Bridge, Montmagny, Que.	10-27
12- 1	Bridge, Peoria, Ill.	11-17
12- 2	Bridge, Indianapolis, Ind	11-17
12-20	Bridge, Norwalk, Conn.	11-17

Buildings.

11-18	**Engine house, Milwaukee, Wis.**	11- 3
11-19	**Quarters, Mare Island, Cal.**	10-13
11-19	**Post-office, Eagle Pass, Tex.**	10-13
11-21	Boiler house, etc., Philadelphia, Pa. (Mfg. Pl.)	11-17
11-21	School, Boston, Mass.	11-17
11-22	Hospital, Ashland, Ohio	11-17
11-22*	**Post-office, Lewiston, Idaho**	10- 6
11-22	**Post-office, Porto Rico**	10- 6
11-22	Court house, Tifton, Ga.	11- 3
11-22	High school, Jersey City, N. J.	11- 3
11-22	Excavation, etc., Cleveland, O.	11-10
11-24	Garage, etc., Philadelphia, Pa.	11-17
11-28	Public building, Nelson, B. C.	11-17
11-28	Public building, Nanaimo, B. C.	11-17
11-28	Warehouse addition, Philadelphia, Pa	11-17
11-28	Office building, Mt. Carmel, Pa	11-17
11-28	School, New York, N. Y.	11-17
11-28	**Building, St. Paul, Minn.**	11-10
11-30	Building, Phila., Pa.	9-29
11-30	Building decorating, Indianapolis, Ind.	11- 3
11-30	Barracks, Fort Winfield Scott, Cal.	11-17
12- 1	Post-office, New York, N. Y.	10-20
12- 1	School, Portland, Ore.	10-27
12- 1	Jail, etc., Troy, N. Y.	10-27
12-	*High schools, Toledo, Ohio	11-10
12- 5*	Post-office, Santa Cruz, Cal.	10-27
12- 5	Courthouse, Sacramento, Cal.	11- 3
12- 7	Armory, Pomeroy, Ohio	11-17
12- 7	Post office, etc., Ellsworth, Me.	11-17
12- 8*	Post-office, Granite City, Ill.	11- 3
12- 8	Post-office, Carbondale, Pa.	11- 3
12-14*	Post-office, Lead, S. Dak.	11- 3
12-15*	Repair shop, Fort Monroe, Va.	11-10
12-15*	Changes at post-office, etc., Montgomery, Ala. (Mfg. Pl.)	11-17
12-15*	Prison, Wingdale, N. Y.	11-17

Water-Works.

11-18	Intake and well, Saginaw, Mich.	11-17
11-19*	Dam, etc., Brookville, Pa.	11- 3
11-21	Water supply, Pittsburg Landing, Tenn.	11- 3
11-21	Waterpipe, Los Angeles, Cal.	11-17
11-21	Water-works, supplies, Providence, R. I.	11-17
11-22	Traveling crane, Toronto, Ont.	11-17
11-25	Pumps, Minneapolis, Minn.	11-17
11-26	Wells, etc., Coshocton, Ohio	11-17
11-27	Water-meters, Rugby, N. Dak.	11-10
11-28*	**Water-works, South River, N. J.**	10-27
11-30*	**Diversion channel, Portland, Ore.**	9-29
11-30	Distributing canals, Powell, Wyo	11- 3
12- 1*	**Head gates, Boise, Idaho**	10-20
12- 3	Sublaterals, North Yakima, Wash.	11-17
12- 6	Tank and tower, Pima, Ariz.	11-10
12- 7	Water-works, Timmonsville, S. C.	11-17
12-12*	Dam and reservoir, Pittsfield, Mass.	11-17
12-13*	Pumps, Seattle, Wash.	11-17
12-15*	**Diversion work, Klamath Falls, Ore.**	10-20

Sewers.

11-17	Sewers, Chicago, Ill.	11-17
11-17	Sewers, Ansonia, Conn.	11-17
11-18	Sewers, Kenosha, Wis.	11-17
11-18	Sewer, Ft. Caswell, N. C.	10-27
11-21	Sewer material, Providence, R. I.	11-17
11-21	Sewers, Cincinnati, Ohio	11-17
11-21	Sewers, St. Paul, Minn.	11-17
11-22	Sewers, Lorain, Ohio	11-17
11-22	**Sewers, New York**	11-10
11-22	**Sewer, New York**	11-10
11-23	**Sewers, Brooklyn, N. Y.**	11-10
11-23	Sewers, Brooklyn, N. Y.	11-17
11-23	Sewers, Roanoke, Va.	11-17
11-23	Sewers, Pekin, Ill.	11-17
11-28*	Sewers, South River, N. J.	10-27
11-28	Sewer, Piqua, Ohio	11-17
12- 1	Sewer, Galion, Ohio	11-17
12- 7	Sewer, Timmonsville, S. C.	11-17

Streets and Roads.

11-17	Flagging, etc., Newark, N. J.	11-17
11-17	Grading, etc., Newark, N. J.	11-17
11-18	Paving, Lincoln, Neb.	11-17
11-18	Road improvement, Cincinnati, Ohio	10-27
11-18	Road, Cincinnati, Ohio	11- 3
11-18	Roads, Jackson Barracks, La.	11- 3
11-21*	Paving, Amarillo, Tex.	11-10
11-21	Sidewalks, etc., Addington, Okla.	11-17
11-21	Paving, Montgomery, Ala.	11-17
11-21	Street, Boston, Mass.	11-17
11-22	Paving, Tulsa, Okla.	11-17
11-22	Paving, etc., Dalton, Ga.	11-17
11-22	Paving, etc., New York, N. Y.	11-17
11-22	Gravel road, Anderson, Ind.	11- 3
11-22	Curbs, etc., New York	11-10
11-23	**Paving, etc., New York**	11-10
11-25	Road, Cincinnati, Ohio	11-10
11-25	Sidewalks, etc., Roanoke, Va.	11-17
11-26	Grading, Cleveland, Ohio	11-17
11-30	Road, Terre Haute, Ind.	11-17
12- 2	Road, Cincinnati, Ohio	11-17
12- 5	Highway, Jeffersonville, Ind.	11-17
12- 5	Gravel roal, Liberty, Ind.	11-17
12- 5	Road, Greencastle, Ind.	11-17
12- 5	Road, Williamsport, Ind	11-17
12- 5	Sidewalks, etc., Linden Heights, Ohio	11-17
12- 6	Roads, Rensselaer, Ind.	11-17
12-13	Paving, Crookston, Minn.	11- 3

Miscellaneous.

Bids close.		Noted in issue of
11-18	Repairing ferry structures, New York	11-10
11-18	Dredging, Boston, Mass.	11-10
11-18	Drainage district, Fort Dodge, Iowa.	11-10
11-18	Culvert, Fort Sam Houston, Tex.	11-17
11-19	Ditch, Aztec, N. Mex	11-17
11-19	**Levee work, Allenfarm, Tex.**	10-27
11-19	**Seawall, Norfolk, Va.**	10-20
11-19*	**Dredging, Newport, R. I.**	10-20
11-19	Tile, Shelbyville, Ind.	11-10
11-20	Drainage ditch, Dahlgren, Ill.	11-10
11-21	Hook and ladder truck, Providence, R. I.	11-17
11-21	Fire wagon, Providence, R. I.	11-17
11-21	Pumps, England (Foreign)	11-17
11-21	See Electric Railways, San Rafael, Cal.	11- 3
11-21	Extending jetty, Cleveland, Ohio.	11-10
11-21	Removal of wreck, Jacksonville, Fla.	11-10
11-21	Lodge, wall, etc., Pittsburg Landing, Tenn.	11-10
11-22	Mechanical stokers, Akron, Ohio.	10-27
11-22*	Dredging, New York	10-27
11-22	Barge Canal, Albany, N. Y.	11- 3
11-22	Timber dock, Michigan City, Ind.	11-10
11-22	Ice piers, Annapolis Royal, N. S.	11-10
11-22	Breakwater, North Inguish, N. S.	11-10
11-22	Snow and ice removal, (garbage) New York.	11-10
11-22	Drainage ditches, Batesville, Ark.	11-17
11-22	Lumber, Washington, D. C.	11-17
11-23	Extension to breakwater, Lorneville, N. B.	11-17
11-23	Hose wagons, New York	11-17
11-23*	**Dredging, Boston, Mass.**	10-27
11-23*	Removing dike, dredging Cincinnati, Ohio	10-27
11-23*	Breakwater, Duluth, Minn.	10-27
11-23*	Dredging, Boston, Mass.	10-27
11- 24	Drain, Lebanon, Ind.	11- 3
11-24*	Steel forgings, castings, etc., Charleston, S. C.	11- 3
11-25	Hose, Duluth, Minn.	11-10
11-25	Boiler, car wheels, Panama. (U. S. Poss)	11-17
11-25	Level work, Yuma, Ariz.	11-17
11-29	Gymnasium apparatus, New York	11-17
11-29	Engines, New York	11-17
11-29	Market house repairs, New York	11-17
11-30	Dredging, Fort H. G. Wright, N. Y.	11-17
12- 1	Ditches, Pine Bluff, Ark.	11-17
12- 1	**Door operating system, New York**	10-20
12- 1	**Port works, Turkey (Foreign)**	10- 6
12- 1	**Battleship, Colliers, Washington, D. C.**	10- 6
12- 1	Extending breakwater, Los Angeles, Cal.	11- 3
12- 1*	Lumber, Washington Barracks, D. C.	11- 3
12- 1*	Dredging, Wilmington, Del.	11- 3
12- 1	Railway, Carriages, China (Foreign)	11-10
12- 1	Armor, Washington, D. C.	11-10
12- 2*	Wharf, Richmond, Va.	11-10
12- 2	Flagstaff, Fort Sam Houston, Tex.	11-17
12- 3	Dredging, Newport, R. I.	11- 3
12- 3	**Coal and ash handling apparatus, Norfolk, Va.**	10-27
12- 5	Dredging, Wilmington, Del.	11-10
12- 5	Vacuum cleaning system, Columbus, Ohio	11-17
12- 5	Levee, Lancaster, Ohio	11-17
12-5	Landing pier, Stratford, Que.	11-17
12- 6	Wharf, St. Joseph de Letellier, Que	11-17
12- 6	Drains, Sac City, Iowa	11-10
12- 7	Oil storage system, Rock Island, Ill	11-17
12- 8	Ditch, Marshall, Minn.	11-17
12- 9	Drainage canal, Howard, Miss.	11-17
12- 9*	Removing rock ledge, Cincinnati, Ohio.	11-10
12-10	Pier, Bremerton, Wash.	11-10
12-10	Quay wall, Key West, Fla.	11-10
12-10*	Dredging, Wilmington, Del.	11-17
12-12	Dredging rock removal, New York.	11-10
12-13	**(1911) Copper mine, Turkey (Foreign)**	10- 6
12-15	Dry-dock, etc., Argentina (Foreign)	11-10
12-17*	Dredging, Providence, R. I.	11-17
1 -17	Metal superstructures for bridges, Uruguay, (Foreign)	11-17
12-22	Steel caissons, New York	11-10
1- 7	**Dredging, Hawaii (U. S. Poss)**	10-27
1- 9	Tramway plant and equipment, England (Foreign)	11-17

Examinations.

Applications filed.		Noted in issue of
11-21	Examiners of Efficiency, Chicago, Ill.	11-10
11-22	**Junior Engr., Pittsburg, Pa.**	10-27
11-22	**Aid, Washington, D. C.**	10-27
11-22	**Examiners of Efficiency, Chicago, Ill.**	11-10
11-23	**Copperplate Map Engraver, Wash., D. C.**	10-27
11-26	**Telephone traffic inspector, Albany, N. Y.**	10-20
11-26	**Special investigator, Albany, N.Y.**	10-20
11-26	**Mechanical engr., Albany, N.Y.**	10-20
11-26	**Junior statistician, Albany, N. Y.**	10-20
11-26	**Highway inspector, Albany, N.Y.**	10-20
11-26	**Chief investigator, Albany, N. Y.**	10-20
11-26	**Assistant gas inspector, Albany, N. Y.**	10-20
11-26	**Assistant chief, Albany, N. Y.**	10-20
12- 7	**Preparator of Fossils, Washington, D. C.**	11- 3
12- 7	**Scientific Assistant in Soil Bacteriology, and Scientific assistant in Tobacco Chemistry, Wash., D. C.**	11-10
12- 7	**Mineral Examiner, Wash, D. C.**	11-10
12- 7	**Cartographic Draftsman, Wash., D. C.**	11-10
12- 7	**Fortification Draftsman, Wash., D. C.**	11-10
12-7, 8 and 9	**Inspector of Mech. & Elec. Engineering, Washington, D. C.**	11-10
12- 7	Superintendent of Construction, Washington, D. C.	11-17
12- 8	Gas Meter Tester, Albany, N. Y.	11-17
12- 8	Assistant Electrical Engineer, Albany, N. Y.	11-17
12- 8	Chemist, Albany, N. Y.	11-17
12-17	Assistant in Dairy Bacteriology, and Assistant in Dairy Chemistry, Washington, D. C.	11-17
12-28	**Industrial teacher, Washington, D. C.**	11-10
1- 4	**Chemist in Forest Products, Washington, D. C.**	11- 3
1- 4	**Mechanical Draftsman, Washington, D. C.**	11-17
1- 4	**Metallurgical Chemist and Assayer, Washington, D. C.**	11-17
1- 4	**Physical Laboratory Helper, Washington, D. C.**	11-17
1- 4	**Mechanical and Chart Draftsman, Washington, D. C.**	11-17

valves, expansion joints, flanged elbows, tees, crosses, offsets, etc., are also described. This company has gone to considerable expense in investigating and experimenting with high grade steels for this purpose. Tests of the steel used give a minimum tensile strength of 60,800 lbs. per square inch. The valve seats are made of pure nickel, and the stems of the best grades of valves are of nickel-steel.

TITANIUM STEEL RAILS.—Titanium Alloy Mfg. Co., Pittsburg, Pa. Paper; 6¼ × 9½ ins.; pp. 41; illustrated.

Some excellent views of ingots, rail tests, etc., are given, to emphasize the value of ferro-titanium additions to rail steel.

VANADIUM STEEL.—Carnegie Steel Co., Pittsburg, Pa. Paper, 5 × 7½ ins.; pp. 18.

Six types, subdivided into 14 grades, of vanadium steel are listed. The makers give use, heat treatment, test strength and elongation values, etc.

CARD INDEX CABINETS AND SECTIONAL BOOKCASES.—The Macey Co., 80 Wabash Ave., Chicago. Paper; two pamphlets; 3½ × 6 ins.; pp. 4 and 12.

The smaller pamphlet shows boxes and cabinets for card index records. The larger one shows a number of designs of bookcases built up of sections of different sizes.

BASCULE BRIDGES. — Strauss Bascule Bridge Co., Fort Dearborn Bldg., Chicago, Ill. Paper, 10½ × 7¾ ins.; pp. 12; illustrated.

Besides showing half-tone views of various Strauss bascule bridges, the pamphlet mentions two new forms, the "heel trunnion" type and a "two leaf simple-span bascule" design.

WATERPROOFING. — Harrison Waterproof Materials Co., New York City; 3½ × 6 ins.; pp. 12; illustrated.

"Keystone" waterproofing is a light, white and palpable powder with a calcium base which is mixed dry. The present pamphlet shows some of its uses and methods of application.

TRENCH PUMP.—C. H. & E. Mfg. Co., 321 Mineral St., Milwaukee, Wis. Paper; 3½ × 6½ ins.; pp. 4; illustrated.

The pump is of the diaphragm pump, with the handle attached to a vertical connecting rod on a wheel geared to a 3-horsepower gasoline engine. The engine and pump form a complete unit, mounted on a portable base.

WATERPROOFING.—The Hercules Waterproof Cement Co., Buffalo, N. Y., 3½ × 6 ins.; pp. 21.

This booklet gives a series of tests made upon concrete mixed with the "Hercules" waterproofing cement, and also a list of methods by which it can be used. The compound is made in powder, paste and liquid form.

REINFORCED CONCRETE.—Trussed Concrete Steel Co., Detroit, Mich.; 5¼ × 7¾ ins.; pp. 127; illustrated.

This fourth edition of Kahn's handbook contains a number of revisions of previous work. The subject of waterproofing has been rewritten and new sets of tables for hooped columns and footings added. It contains a quantity of good material which is applicable to all kinds of concrete design.

AIR COMPRESSORS.—Allis-Chalmers Co., Milwaukee, Wis. Paper; 3¼ × 6¼ ins.; pp. 8; illustrated.

Small air compressors for industrial uses, such as cleaning machines in textile mills and other apparatus, for driving small pneumatic tools, electric fountains for display purposes, for operating air whistles for fire-alarms, etc., for inflating automobile tires and numerous other uses, are briefly described in this little booklet.

COLLAPSIBLE CENTERS.—Hartford Paving & Construction Co., Hartford, Conn. Folder; illustrated.

The "O'Connor" centering was used very successfully in the construction of a number of sewers at Hartford, Conn., and its maker then decided to patent it and put it on the market. It is a collapsible framework with an outside shell conforming to the sewer or arch shape, with a simple toggle-joint take-down in the middle.

CONVEYING MACHINERY.—Link Belt Co., 299 Broadway, New York City. Books Nos. 83 and 96. Both paper; 6 × 9 ins.; pp. 64 and 52, respectively; both illustrated.

Book No. 83 contains illustrations of conveyors for miscellaneous freight and packages. An adjustable freight conveyor is shown for loading or unloading vessels. It consists of an endless traveling platform hinged at the inner end so that the height of the outer end may be adjusted for different vessels or for different water levels. This conveyor carries the men, with their loaded trucks, either up or down the incline. A number of conveyor installations are shown for carrying packages, bags, boxes, barrels, etc., in factories, warehouses, etc.

Book No. 96 shows conveying machinery for sugar estates and refineries. Machines are shown for unloading sugar cane, and conveyors for performing all the operations of this class required in a sugar refinery, including the handling of loaded bags and barrels.

MALLET DUPLEX LOCOMOTIVES.—American Locomotive Co., New York, N. Y. Paper; 8 × 10¾ ins.; pp. 15; illustrated.

This pamphlet (Bulletin No. 1006) describes the general features of the Mallet type of articulated duplex compound locomotive, and describes also a number of its detail parts, including the intercepting, by-pass, vacuum and relief valves, the flexible joints, and the power reversing gear. There is also a summary of the rules for operating the engine.

LAMINATED LEATHER BELTING.—American Laminated Belting Co., 111 Hudson St., New York City. Paper; 4 × 9 ins.; pp. 12; illustrated.

"Albeco" belting is described as made up of laminations, or strips, of leather placed side by side and bound together with small cables of flexible linen thread. The strips are so placed that the cut edges of the leather forms the belt surface. This is claimed to give a better wearing surface and to reduce the slippage. Another of the advantages claimed for this belting is closer conformity to the shape of a crowned pulley. An installation of an "Albeco" belt transmitting 500-HP. from a pulley 90 ins. in diameter to a pulley 42 ins. in diameter is described and illustrated. The distance between centers is given as 28 ft. 2 ins. This belt is ¾-in. thick and has a cross-section of 21 sq. ins. It was used to replace a 32-in. three-ply leather belt strengthened by a 24-in. three-ply rider. The total cross-sections of the old belt and rider was 39 sq. ins. The "Albeco" belt, which is said to have given complete satisfaction, was installed because of constant trouble with the other belts due to excessive slippage and overheating of the driven pulley.

DIGGING MACHINERY AND BUCKETS.—The Hayward Co., 50 Church St., New York, N. Y. Paper; two pamphlets; 9 × 12 ins., 78 pp., and 6 × 9 ins., 28 pp.; illustrated.

The larger pamphlet consists mainly of a large number of half-tone engravings showing the company's clam-shell and orange-peel buckets in use both for handling material (such as coal, sand, etc.) and for excavation on railway, canal, foundation and other work. One of the most interesting pieces of work is the sinking of 14-in. steel cylinders for foundation in New York by excavating the material inside the cylinders with a miniature orange-peel bucket weighing 28 lbs. In contrast to this is a three-section orange-peel bucket 12 ft. in diameter over the points of the blades (when open), and forming when closed a bowl 10 ft. diameter and 5 ft. deep. This is for the deep channel in the Delaware River. The smaller pamphlet is a descriptive catalogue of clam-shell and orange-peel buckets of different patterns, ranging from 1 cu. ft. to 10 cu. yds. in capacity.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56 of Advertisements and Construction News page 244.

PRESSURE TUNNEL.

BOARD OF WATER SUPPLY OF THE CITY OF NEW YORK.

Nov. 16, 1910.

The Board desires to direct the attention of contractors to four contracts for the pressure tunnel to be constructed from the Hill View reservoir, beneath the Boroughs of The Bronx and Manhattan, to a point near the Atlantic Avenue subway station, in Brooklyn. It is expected that these contracts will be ready for advertising during December, 1910, and attention is now called to them so that the many details of the work may be studied and general familiarity with it gained before it is finally advertised.

This tunnel will be driven at from 250 to 700 feet below the surface and will be lined with concrete. It will range from 11 to 15 feet in finished diameter and will be constructed from 24 shafts, spaced from 3,000 to 5,000 feet apart. Its total length will be about 17½ miles. Chambers at the heads of the various shafts are also to be constructed so that through them and the shafts connections for the delivery of the water into the distribution systems can be made.

Further details and information can be obtained at the office of the Chief Engineer, Room 722, 165 Broadway.

JOHN A. BENSEL, President;
CHARLES A. SHAW,
CHARLES N. CHADWICK,
Commissioners of the Board of Water Supply.
J. WALDO SMITH, Chief Engineer.
THOMAS H. KEOGH, Secretary.

DREDGE WORK.

Waterford, N. Y.

Will sublet about 200,000 cu. yds. of Dredge Work located on lower end of Champlain Canal, Contract No. 70, at Waterford, New York.

For detailed information and plans apply to

SHANLEY-MORRISSEY, INC.
Mechanicville, New York.

DISPOSAL PLANT.

Atlanta, Ga.

Sealed proposals addressed to Hon. R. F. Maddox, Mayor, will be received at the Mayor's office until 3:00 P. M., Monday, Dec. 12th, 1910, for the construction of the Peachtree Creek Disposal Plant to be located on Peachtree Creek about five miles from the City, the estimated cost of which is approximately Two Hundred Thousand ($200,000.00) Dollars.

Proposals will also be received at the same time and place for the construction of the Peachtree Creek and Ormo Street Intercepting Sewers, consisting of approximately seven miles of forty-eight inch concrete sewer with the necessary manholes, excavation, tunnelling, culverts, etc., the estimated cost of which is approximately Two Hundred, Seventy Thousand ($270,000.00) Dollars.

Plans and specifications for the above work will be furnished by Messrs. Hering & Fuller, Consulting Engineers, 170 Broadway, New York City, or R. M. Clayton, City Engineer, Atlanta, Ga., on deposit of Twenty-five ($25.00) Dollars to be held until the return of the plans and specifications.

The right is reserved to reject any or all bids.

R. M. CLAYTON,
City Engineer.

November 14, 1910.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Nov. 14, 1910.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 27th day of December, 1910, and then opened, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the United States Post Office at Missoula, Mont., in accordance with drawings and specification, copies of which may be obtained from the Custodian of site at Missoula, Mont., or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

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